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Transforming Trade Competition into Coordination with PRC

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Transforming Trade Competition into Coordination with PRC

Huijiong Wang and Shantong Li

. Introduction

China has enjoyed an extra rapid growth rate of its economy and external trade since its reform and opening to the outside world. The average annual growth rate of GDP and external trade reached 9.8% and 17.4% from 1978[1] to 2007. The growth rate of export and import in this period are 18.1% and 16.7% respectively. Total amount of foreign capital actually utilized from 1979-2005 is 745.3 billion U.S.D., within which, around 20% of it is foreign loans, the value of FDI reached around 75.4%, while the remaining 4.6% is other types of foreign investments. China and Hongkong SAR retained their position as the largest FDI recipients in the South, East and South-East Asia in 2006. Structure of production and trade is also effected greatly by FDI. It is also necessary to point out the fact that China is now becoming a source of FDI outflows from the region. It is pointed out in WIR 2007 that: FDI outflows from the region as a whole rose by 60% to $103 billion. Outflows from Hongkong SAR, the largest source of FDI in the region reached $43 billion. China consolidated its position as a major investor, and India is rapidly catching up. In an increasingly globalized world with increasing integration of economic activity, trade and investment played a very important role in the growth of national economy and prosperity of the global society. The major actors in this globalizing process is TNCs, but national government and international organizations should also play their proper role. Although WTO was formally established in 1995 and contributed greatly to the fair trade of the world, but there are also proliferations of Regional Trade Agreements since 1990's. And also there are features of growth of "South-South" trade and high share of intraregional trade in many regions. A recent collaborative study between UNCTAD and Jetro[2] titled "South-South Trade in Asia: the Role of Regional Trade Agreement" have provided a detailed indepth analysis of "South-South Trade in Asia" and the rationality of transforming trade competition into coordination although promotion of effective competition to achieve a more efficient allocation of resources is a necessity of a properly functioning market. It should be pointed out that the theme of this paper of exploration of 'competition' and 'coordination' may involve many theoretical aspects which are not the purpose of this study. Facts and data will be presented, existed studies from international organizations and conclusions derived by them will be quoted to give the rationality of trade cooperation with PRC rather than competition of rationality Although there is increasing share of service in trade, but only merchandise trade is studied here in order to limit the scope of this paper.

[1] Note: In China, the starting period of opening and reform is counted with 1978 to be the base year.
[2] Note: Jetro abbreviation of Japan External Trade Organization.

Part China in the World Economy

2.01 General China has been emerged to be the fourth largest economy among the world in 2007 after around six decades of its industrialization since the establishment of PRC in 1949 and three decades of reform and opening to the outside world since 1978. It can be seen that the emergence of China had not raised the awareness of the global society before 1990's. It's share of export of goods and non factor service was only 18%[3]of GDP in 1990, while its Asian neighbors such as Indonesia, Philippines, Thailand and Malaysia had a share of 26%, 28%, 30%, 79% respectively. The growth experience of the above four countries and other four economies, Singapore, Hong Kong S.A.R. Korea, Republic of and Taiwan, Province of China had been studied in the well known publication 'The East Asian Miracle of the World Bank in 1993. Growth potential of China and India was recognized by the study of ADB in "Emerging Asia" in 1997, and the very recent study "Dreaming with the BRICs: The Path to 2050" by Golden Sachs in 2003. The world trade growth is declined from 8.5% in 2006 to 5.5% in 2007. But the most populous developing counties continued to report outstandingly high economic growth and good performance in external trade. The growth rate of export of China and India in 2007 is 19.5% and 10.5% respectively while the growth rate of import is 13.5% and 13% respectively. The high growth rate of them and other emerging economies offset partially the sharp economic and trade deceleration in key developed countries. Although the global society has a large amount of international trade, but the world merchandise trade is characterized by intra-regional flows due to the barrier of distance and high share of transport cost in service. It is reported by WTO that [4]intra-regional trade flows of North America, Europe and Asia represent 53% of world merchandise trade and almost two thirds of the merchandise trade of these three regions. The experiences of NAFTA, EU and other RTAS provide some positive vision of regional cooperation. With the size, population and growth performance and potential of China, "Transforming trade competition into coordination with the PRC" may be a rational choice of strategy in the process of globalization and regionalization especially for countries in the Asian region. In order to explore better the theme of this paper, a brief description of some recent economic facts of China in 2007 will be given in this part.

2.02 Growth performance of Chinese economy and industry

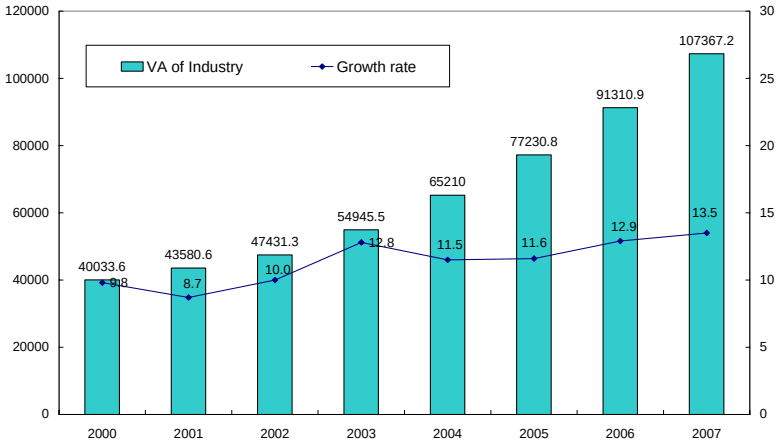
1. Chinese Economy in 2007

GDP of China in 2007 reached 24953.0 billion yuan (which is approximated around 3416.1 billion U.S.D. based upon official exchange rate of 1U.S.D.=7.3046 RMB by the year end of 2007). The share of primary, secondary and textually sector in GDP is 11.3%, 48.6% and 40.1% respectively. China has a relatively low share of tertiary sector in GDP compared to the average figure of low income or middle income economies.

2. Industrial Sector of China China has a high share of industrial production in its

[3] Note: comparison of China's export and its four Asian neighbors is based upon World Development Report 1992 of the World Bank.
[4] Note :WTO Trade Statistics 2007.

GDP, it is 43.0%[5] in 2007. The value added of industry and its growth rate from 2000-2007 is shown in figure 2.1.



[6]Fig.2.1 Growth Performance of Chinese Industry 2000-2007

3. Amount of major industrial products and their growth rate.

[7]Table 2.1 Amount of major industrial products and their growth rate

Iterm	Unit	Amount	Growth Rate % compared to 2006	Remarks
Cotton yarn	10^4 ton	2000	14.7	
Cloth	100m.meter	660	10.3	
Chemical fiber	10^4 ton	2390	15.3	
Sugar	10^4 ton	1271.4	34	
Tobacco	100m.piece	21413.8	5.9	
Colored TV	10^4 unit	8433	0.7	
Household Refrigerator	10^4 unit	4397.1	24.5	
Household air conditioner	10^4 unit	8014.3	17	
Primary energy	100m. SCE	23.7	7	
Crude coal	100m. ton	25.36	6.9	
Crude oil	100m. ton	1.87	1.1	
Natural gas	100m. M^3	693.1	18.4	
Electricity generation	100m. kw-hr	32777.2	14.4	
Steel	10^4 ton	56894.4	21.3	
Refined copper	10^4 ton	344.1	14.6	
Aluminum	10^4 ton	1228.4	32.6	
Cement	100m. ton	13.6	9.9	
Sulfuric acid	10^4 ton	5500	9.3	

[5] Note: The value here differs from the value of share described in 1 because the later includes the value added of construction.

[6] Source: 2007 National Economic and Social Development Statistics Press Release by: State Bureau of Statistics PRC Feb.28,2008.

[7] Source: Same as Fig.2.1.

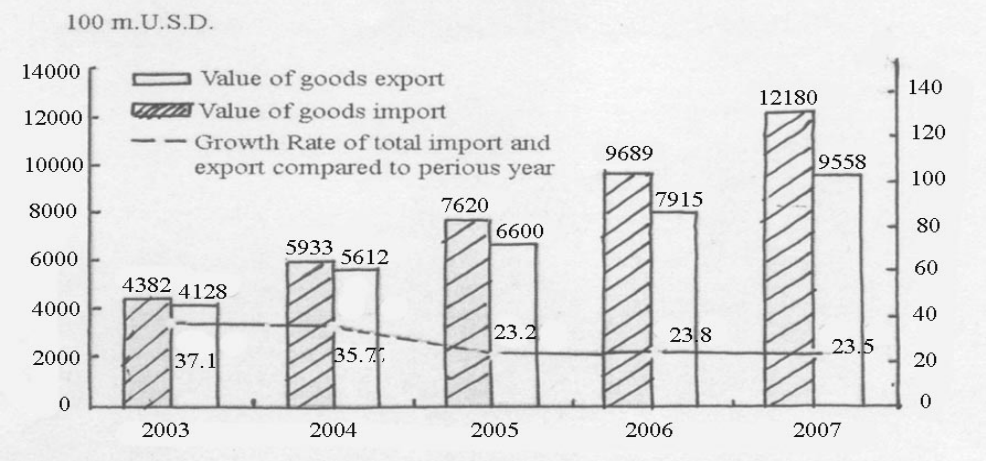
Iterm	Unit	Amount	Growth Rate % compared to 2006	Remarks
Ethylene	10^4 ton	1047.7	11.4	
Chemical fertilizer	10^4 ton	5786.9	8.3	
Generating Equipment	10^4 kw	12991	11.1	
Car	10^4 unit	888.7	22.1	
Within which: passenger car	10^4 unit	479.8	24	
Tractor	10^4 unit	20.3	1.9	
Integrated circuit	100m.chip	411.6	22.6	
Programme controlled telephone exchange	10^4 line	5387.1	-27.2	
Mobile phone	10^4 unit	54857.9	14.3	
Micro personal computer	10^4 unit	12073.4	29.3	

2.03 Growth of International Merchandise Trade in 2007

The Chinese official statistics generally does not provide the detail trade data of service sector. Hereunder, the merchandise trade of China will be discussed.

1. Growth of merchandise trade of China 2003-2007

China has a very high growth rate of merchandise trade post mid 90's of last century. Fig.2.2 provides the growth pattern of merchandise trade of China from 2003-2007



[8]Fig.2.2 Growth of Goods Import and Export of China 2003-2007

2. Merchandise Trade of China in 2007

The total amount of merchandise trade of China in 2007 reached 2173.8 billion U.S.D. with a growth rate of 23.5% compared to 2006. Within which, the export of goods reached 1218 billion U.S.D., with a growth rate of 25.7%; the import of goods reached 955.8 billion U.S.D., a growth rate of 20.8%, with a trade surplus of 262.2 billion U.S.D.in merchandise trade. China is ranked the third exporter in the world market in 2007. Merchandise trade of various categories and their growth rate is shown

[8] Source: Same as Fig.2.1.

in table 2.2.

[9]Table 2.2 China's Amount of merchandise trade of various categories and their growth rate (2007)

Item	Value	Growth Rate % compared to 2006
Total amount of import and export	21738	23.5
Export of goods:	12180	25.7
Within which: General trade	5386	29.4
Processing trade	6177(50.7%)	21
Within which: Electric and mechanical products	7012	27.6
High and new technological products	3478	23.6
Within which: State owned enterprises	2248	17.5
Foreign invested enterprises	6955(57.1%)	23.4
Others	2977	39.2
Import of goods:	9558	20.8
Within which: General trade	4286	28.7
processing trade	3684	14.6
Within which: Electic and mechanical products	4990	16.7
High and new technological products	2870	16
Within which: State owned enterprises	2697	19.8
Foreign invested enterprises	5594(58.5%)	18.4
Others	1267	35.1
Trade surplus:	2622	47.7
Within which: General trade	1099	32.2
Processing trade	2493	32
Others	-970	2.6

It can be seen from table 2.2 that, foreign invested enterprises have higher share of value of merchandise trade both in import and export. The processing trade also has a higher share in export of goods.

3. Pattern of trade

(1) Table 2.3 presents the value of various destinations of China's trade in 2007. It can be seen from this table that intra-regional trade within Asia has the highest share of total trade.

[10]Table 2.3 Value of various Destination of China's Trade and their growth rate 2007
(100 m.U.S.D.)

[9] Source: Same as Fig.2.1
[10] Source: Same as Fig.2.1

Country and Region	Value of Export of goods	Growth Rate % Compared to 2006	Value of Import of goods	Growth Rate % Compared to 2006
EU	2452	29.2	1110	22.4
U.S.A.	2327	14.4	694	17.2
Hong Kong S.A.R.	1844	18.8	128	18.9
Japan	1021	11.4	1340	15.8
ASEAN	942	32.1	1084	21
South Korea	561	26.1	1038	15.6
Russia	285	79.9	197	12.1
India	240	64.7	146	42.4
China Taiwan	235	13.1	1010	16

It can be seen from table 2.3 that European Union is becoming the No.1 trade partner of China, the total value of import and export reached 356.2 billion U.S.D. in 2007, and U.S.A. ranked the second , it is 302.1 billion U.S.D. While intra-regional trade in Asia reached 981.1 billion U.S.D. There is also growth of trade between ASEAN and China since the effectness of ASEAN-China FTA in 2003.

(2) Table 2.4 presents the data of China's trade with Japan, South Korea, Hongkong S.A.R., countries of ASEAN and India in 2006, which have a higher share of intra-regional trade with PRC.

[11]Table 2.4 Value of trade of intra-regional major trade partner of China in 2006 (10000.U.S.D.)

Country or region	Value of Export of Goods	Value of Import of Goods	Trade Surptus
Asia Total	45572692	52536718	-6984028
Japan	9162267	11567258	-2404991
South Korea	4452221	8972414	-4520193
Hongkong S.A.R.	15530907	1077976	14452931
Taiwan, China	2073308	8709863	-6636555
India	1458130	1027745	430385
Brunei	9963	21531	-11568
Myanmar	120742	25265	95477
Cambodia	69776	3509	66267
Indonesia	944971	960574	-15603
Laos	16872	4965	11907
Philippines	573813	1767456	-1193643
Singapore	2318529	1767262	551267
Thailand	976406	1796243	-819837
Vietnam	746336	248608	497728
Malaysia	1353707	2357243	-1003536
ASEAN Total	7131115	8952656	1821541

[11] Source: China Statiscs yearbook 2007 China Statistics Press.

2.04 FDI

1. The high growth rate of Chinese economy and its international trade since its reform and opening is contributed very much by the foreign direct investment. It can be seen from table 2.2 that foreign invested enterprises played a dominant role in China's export and import. Table 2.5 presents the foreign direct investment by sector in 2007.

[12]Table 2.5 Sectoral FDI Inflow of China 2007

Name of Sector	No.of Enterprises	Growth Rate % compared to 2006	Money Utilized (100m. U.S.D.)	Growth Rate % Compared to 2006
Total	37871	-8.7	747.7	13.6
Agriculture, Forestry, Husbandry	1048	10.2	9.2	54.2
Fishery				
Mining	234	12.5	4.9	5.4
Manufacturing	19193	-22.6	408.6	-4.6
Production and supply of electricity, gas and water	352	-6.1	10.7	-16.6
Construction	308	-12.5	4.3	-36.9
Transport, Warehouse and Postal service	658	-1.1	20.1	1.1
Information transmission, Computer Service and Software	1392	1.0	14.9	38.7
Wholesale and Retail Service	6338	35.9	26.8	49.6
Hotel and Restaurant	938	-11.5	10.4	25.8
Financial Service	51	-1.9	2.6	-12.4
Real estate	1444	-39.8	170.9	107.3
Renting and Business Service	3539	22.7	40.2	-5.2
Scientific Research, Technological Service and Geological Survey	1716	65.8	9.2	81.8
Hydraulic, Environmental and Management of Public Facility Services	154	16.7	2.7	39.8
Household service and other services	270	14.4	7.2	43
Education	15	-44.4	0.3	10.4
Health care, Social Security and				
Social Welfare	13	-35	0.1	-23.7
Cultural, athletic and Entertainment				
Service	207	-14.1	4.5	86.9
Public Management and Social Organization	0	_	0.0	_

The cumulative inflow of foreign investment of China is 882.673 billion U.S.D. from 1979-2006, within which, foreign loan is 147.157 billion U.S.D.. FDI is 691.897 billion U.S.D., while 43.619 billion U.S.D. is other type of foreign investments.

2. Outflow FDI and others

[12] Source: Same as Fig.2.1

China also increases its FDI outflow to abroad in recent years. Non-financial outflow FDI in 2007 is 18.7 billion U.S.D. with a growth rate of 6.2% compared to 2006. [13]Cumulative FDI of China abroad by the year end of 2006 reached 90.6 billion U.S.D., within which, 82.8% of FDI is non-financial investment.

Sales of contracted engineering projects reached 40.6 billion U.S.D., a growth rate of 35.3%, sales of cooperative labor service with abroad reached 6.8 billion U.S.D., a growth rate of 26.0%.

2.05 Transport

1. Transport and tourism are two major components of trade in commercial service in international trade statistics. The cost of transport is also a major factor in influencing domestic and international trade. Due to the territorial size of China and underdevelopment of logistic sector in China, it has a very high share of logistic cost in its GDP, it is roughly estimated around 21.3%[14] in 2003. It is quite high compared to the value of 8.6% of U.S.A. in the same year. Table 2.6 provides freight data of various mode of China in 2007. This is for the purpose to provide an overall picture of freight transport in China.

Table 2.6 Freight Transport of Various Mode of Transport in China 2007

Item	Unit	Amount	Growth Rate % Compared to 2006
Total Amount	100 m. tons	225.3	10.7
Railway	100 m. tons	31.4	9
HighWay	100 m. tons	162.8	11
Water transport	100 m. tons	27.3	9.7
Aviation	10^4 tons	401.8	15
Pipeline	100 m. tons	3.8	17.9
Turnover of freight transport	100 m. ton-km	99180.5	11.8
Railway	100 m. ton-km	23797	8.4
Highway	100 m. ton-km	11257.6	15.4
Water transport	100 m. ton-km	62182.2	12.1
Aviation	100 m. ton-km	116.4	23.5
Pipeline	100 m. ton-km	1827.3	27.4

2. Port Performance

China's port system has an extraordinary growth rate since its reform and opening in late 1970's. The volume of freight of major ports reached 5.21 billion tons in 2007 with a growth rate of 13.4% compared to the previous year, within which , the volume of freight of external trade reached 1.78 billion tons with a growth rate of 12.6%. The container throughput of China's port reached 1.1179 hundred million TEU, with a growth rate of 21.5%. There are six ports of China, Shanghai, Shenzhen, Qingdao,

[13] Note: Source China's FDI abroad Statistics 2006, Press Release Ministry of Commerce.
[14] Note: From: China Logistics Academy Frontier Report (2005-2006) by: China Society of Logistics, China Federation of Logistics and Purchasing China Logistics Publishing House.

Ningbo, Guangzhou and Tianjin, which are ranked among the global top 20 container terminals in their throughput for 2004-2006 based upon “Review of Maritime Transport 2007” of UNCTAD.

. Industrial Performance and Competitiveness of China and its Asian Neighbors

3.01 General This part will provide some basic information of industrial production structure of China and other major Asian countries in order to understand better the condition of competition and coordination in trade, because production and transaction (trade) are two major interrelated components of economic activity. Discussion of the later will be given in part . The industrial performance of Asian major countries based upon recent research and data will be quoted to provide a foundation of discussion with the theme of this paper.

3.02 Measurement of Industrial Performance

1. There are various measures of competitiveness from different studies. The International Institute for Management Development (IMD) had established a system of indicators to measure the competitiveness of a country, eight major indicators are used: domestic economy, internalization, government, finance, infrastructure, management, science and technology and people. Under each major indicator, there are also several sub-indicators. Because competitiveness of industrial performance is concerned in this study, indicators and industrial data from United Nations Industrial Development Organizations (UNIDO) will be used here, because it may be an appropriate institution of UN in providing the right information and knowledge.

2. Efforts of UNIDO in Searching the index for measurement of industrial performance.

UNIDO is in search to establish appropriate index for measurement of industrial performance. The three consecutive publication of Industrial Development Report 2002/2003, 2004 and 2005 can show the efforts it have spent. There are continuous evolutions of the index for measurement of industrial performance in the three publication.

(1) CIP index for measurement of industrial performance

UNIDO has established the Competitive Industrial Performance (CIP) index in its Industrial Development Report 2002/2003. This index is composed of four elements: MVA/capita, manufacturing exports/capita, share of medium-and high-tech activities in MVA and share of medium and high-tech products in manufactured exports. This CIP index system is further evolved to be consisted of six elements. Two more elements are added to the above four, these two new elements are : share of MVA in GDP(percent) and share of manufactured goods in total export (percent).

(2).UNIDO had also established a ranking system of the economies through the drivers of industrial performance. The elements of drivers include: skill index, R&D spending/capita FDI/capita, Royalties/capita and ICT infrastructure index.

(3)ITA index is established in its 2005 publication which is an index of industrial and technological advancement. Fig.3.1 shows that East and South East Asia has the

highest value of ITA(Industry-cum-technological advance) among developing regions.

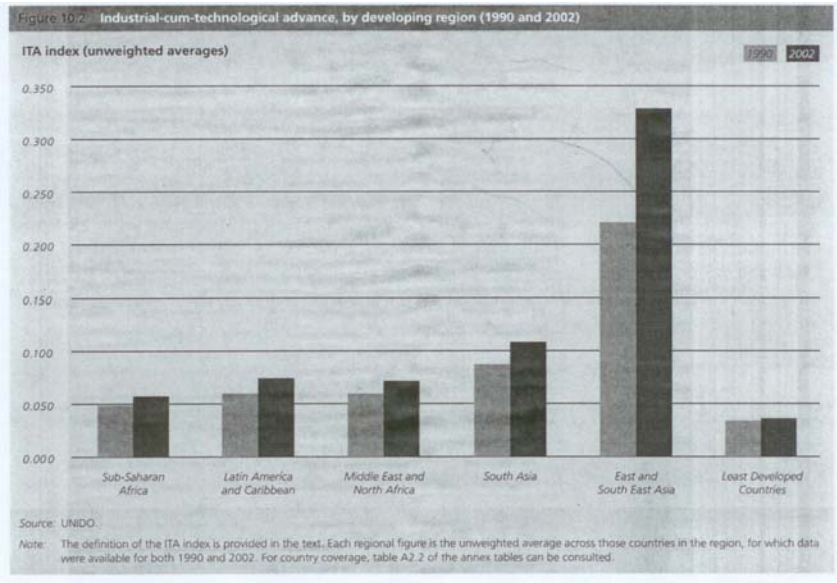


Fig.3.1 Industrial-cum-technological advance, by developing region (1990 and 2002)

3.03 Comparison of industrial competitiveness of China with some Asian economies based upon UNIDO index.

1. Table 3.1 presents CIP index and its components of selected Asian countries. Ranking of countries had been calculated by UNIDO and given in its 2004 Industrial Development Report. The components of CIP are quoted from 2005 Industrial Development Report, because it contains the recent information of 2002. But no ranking of countries is calculated in 2005 publication. U.S. and Germany are added to be reference.

[15]Table 3.1 CIP index and its components of Selected Asian Countries

[15] Source: Industrial Development Report 2004 and 2005 UNIDO.

Country	Rank in 2000	Manufacturing value added (MVA)per capita (1995US$)		Manufactured exports per capita (US$)		Share of manufacturing in total output (GDP) (percent)		Share of manufacturing in total exports (percent)		Share of medium-or-high technology production in MVA (percent)		Share of medium-or-High-technology products in manufactured exports (percent)	
		1990	2002	1990	2002	1990	2002	1990	2002	1990	2002	1990	2002
Singapore	1	4410	6582.5	16266	33106	28.6	28.2	93.2	96.8	78.8	87.6	62.3	78.9
Japan	6	9697	9850.9	2264	3595	26.5	25	97.5	93	66.5	68.1	83.9	86.3
Taiwan pro.of China	9	2842	4397.5	3149	6564	32.7	28.1	95.8	98.3	52.2	58.6	51.6	71.2
Korea, Rep.of	10	100.7	359.4	41.6	234.5	33.1	34.5	76	91.6	51.6	57.3	34.4	45.6
Malaysia	15	2238	4858.7	1455	3591	28.8	33.9	96.2	96.5	55.1	64.1	52.9	70.6
Thailand	23	757.5	1516.5	1287	4121	26.5	35.9	78	93.3	52.3	65.1	50.6	76.2
China	24	520.9	999.6	338.6	869.6	27.2	33.6	80.6	87.4	23.7	42.6	33.3	60.3
Philippines	25	252.4	269.5	69.8	482.4	24.8	24.2	52.7	96.2	31.2	38.3	30	81.8
Hong Kong SAR	27	2043	1133	4843	3212	16.3	8.7	95.3	94.9	41.8	58.5	40.6	36.8
Brazil	31	913.6	865	159.3	221.9	22.5	18.8	75.1	76.8	51.6	54.1	40	51.5
Indonesia	38	162	278.7	82	224	20.7	27	58.6	76.9	30	43.4	10.5	31.3
India	40	49	77.6	16.8	38.5	16.6	15.8	79.6	85.8	55.3	58.4	17.9	19.7
U.S.A.	11	4325	5567.7	1182	1948	18.1	17.6	81.1	88.1	63	63.7	73.4	76.7
Germany	7	6871	6649.1	4665	6512	30.6	27.2	93.2	90.6	66.5	63.2	68.7	74.9

2. Comparison of Drivers of the World Economy and Regional Economies

Table 3.2 presents the drivers of industrial performance of the world economy and economy at various regions. If the figures of the five components of the drivers are compared between East Asia and East Asia exclude China, the former is at a disadvantage. It doesn't mean that China is quite low in skill, technology, FDI and technology imports etc.,it is well known that China has the highest inflow of FDI in Asian region in recent years. But these index are created on per capita bases, this makes China at a disadvantage because the huge population of China. This shows the weakness to certain extent of the index system.

[16]Table 3.2 Drivers of Industrial Performance

Group or region	Skills		Technological advance		FDI		Technology imports		ICT infrastructure	
	Tertiary technical enrolment (per 1000 of population)		R&D Per capita (dollars)		FDI per capita (dollars)		Royalties and technical fees per capita (dollars)		Telephone mainlines (per 1000 of population)	Personal computers (per 1000 of population)
	1985	1998	1985	1998	1981-85	1993-97	1985	1998	1998	1998
World	11.1	14.6	22.9	71.4	13.3	63.4	2.6	14.2	152.5	64.9
Industrialized countries	34.3	40.1	122.3	402.4	54.8	241.6	12	66.2	571.1	316.5
Transition economies	….	26.3	…..	8.8	-	40.8	…	2.5	214	42.7
Developing countries	6.3	8.7	0.6	4.6	4.3	26.9	0.6	3.9	62.6	14.2
East Asia	4.6	9.2	…..	8.7	4.3	39.7	…	7.1	82.7	19.3
East Asia excl.China	12.3	21.9	3.2	31	14.5	63.3	2.7	26.6	119.3	48.6
South Asia	5.1	5.4	0.3	0.3	0.2	2.1	-	0.2	19.7	2.6
Latin America and the Caribbean	16.6	17.3	1.1	6.3	11.1	70.4	1.9	5.3	122.3	33.3
Sub-Saharan Africa	…..	4	0.6	1.3	1.7	8.2	0.4	0.6	16.5	7.8
Sub-Saharan Africa excl. South Africa	1.7	2.7	-	-	1.9	5.3	-	0.2	5.7	3.4
Middle East and north Africa	13.6	20.5	0.4	1.4	16.9	14.1	0.1	3	115	14.8

3. Table 3.3 gives ITA index (2002) of selected economies

[17]Table 3.3 ITA Index (Industry-cum-Technology Advance) of selected Economies (2002)

	ITA index		Industrial advance		Technological advance	
	Value	Rank	Value	Rank	Value	Rank
Singapore	0.52	1	0.625	6	0.832	1
Malaysia	0.457	2	0.646	2	0.707	3
Japan	0.456	3	0.59	13	0.772	2
Korea, Rep.	0.439	4	0.652	1	0.674	7
Taiwan Prov. of China	0.41	5	0.632	3	0.649	10
Germany	0.407	6	0.589	14	0.69	6
United States	0.371	11	0.529	27	0.702	4
Philippines	0.362	13	0.602	10	0.601	14
China	0.324	16	0.631	4	0.515	27
Thailand	0.311	19	0.605	8	0.514	28

[16] Source: Industrial Development Report 2004 UNIDO.
[17] Source: Industrial Development Report 2005 UNIDO.

	ITA index		Industrial advance		Technological advance	
	Value	Rank	Value	Rank	Value	Rank
Hong Kong SAR	0.247	29	0.518	33	0.477	30
India	0.198	35	0.508	36	0.391	41
Indonesia	0.194	36	0.519	32	0.374	43

3.04 Further Comparison of Industrial Performance of China in the Global Economy

It can be seen that China's industrial performance measured by various index of UNIDO is more or less at the middle and the upper middle level, it reflects the truth of China's industrial performance to certain extent. But it had been analyzed previously that the "per capita" base index will put China at a disadvantage due to its huge population. Therefore, further analysis of industrial performance is done based upon the very recent data of UNIDO. Table 3.4 is prepared based upon recent ISIC Rev.3 which compares the structure of MVA of China with all developed and developing countries and selected countries or groups among them. The high share of electrical machinery, basic metals, Chemical and Chemical products in China's structure of MVA as well as food and beverage, tobacco products, textiles and apparels shows that China is competitive in those industrial sectors. Table 3.5 is value added rate which is more or less a rough measurement of efficiency, but may be also a measure of technological advance.

Table 3.4 Structure of MVA in Selected country group

ISIC Division		Industrialized countries					Developing countries						
		All countries	EU-15	Germany	USA	Japan	All countries	NICs	Least developed countries	Korean	Malaysia	India	China
	Year	2006	2006	2004	2004	2005	2006	2006	2006	2005	2004	2004	2005
15	Food and beverage	8.4	11.1	8.2	12.8	9.8	11.9	10.7	26.4	6.1	7.6	7.3	8.9
16	Tobacco products	0.4	0.4	0.4	1.6	0.7	2.9	0.7	8.0	0.5	0.3	1.7	3.6
17	Textiles	1.1	2.0	1.1	1.6	0.7	4.6	3.0	17.5	2.8	1.3	6.5	5.7
18/19	Apparel, fur, leather, footwear	1.0	1.6	0.8	0.9	1.2	3.9	2.1	14.6	2.5	1.6	2.2	4.1
20	Wood products (excl. furniture)	1.8	2.0	1.5	2.1	0.8	1.1	1.2	1.2	0.5	3.4	0.2	0.9
21	paper and paper products	2.6	3.1	2.2	4.1	2.7	2.2	2.2	1.3	1.7	1.6	1.5	2.0
22	Printing and publishing	4.1	5.6	4.4	3.0	4.8	1.7	2.2	2.1	2.3	1.8	1.2	0.8
23	coke, refined petroleum products, nuclear fuel	2.3	1.5	1.7	2.9	5.5	5.9	6.5	1.9	3.5	11.7	11.4	3.5
24	chemicals and chemical products	8.9	12.4	9.9	14.5	7.8	9.7	11.1	9.9	8.7	11.9	16.6	11.2
25	rubber and plastics products	2.6	4.3	4.8	4.5	1.1	3.7	3.4	1.5	4.7	6.3	3.0	3.3
26	Non-metallic mineral products	2.9	4.5	3.1	3.2	2.6	4.1	3.7	4.7	3.4	4.2	5.0	4.9
27	Basic metals	4.1	3.9	4.4	3.7	6.6	7.5	6.5	2.2	8.2	3.9	19.0	13.5
28	Fabricated metal products	5.4	8.6	8.8	6.5	4.1	3.6	4.1	2.3	5.1	3.4	2.3	3.0
29/30	Non-electrical machinery	11.2	12.2	16.0	9.4	12.8	6.7	7.7	1.5	9.7	10.5	5.6	8.1
31/32	Electrical machinery	28.3	9.3	9.8	8.4	20.5	17.9	20.3	1.8	23.9	21.7	4.6	16.2
33	Medical, precision and optical instruments	2.6	3.0	4.1	5.7	1.6	0.9	1.1	0.1	1.2	1.0	0.9	1.3
34/35	Transport equipment	9.4	11.7	16.5	11.6	12.4	9.4	12.0	1.5	13.8	5.1	9.7	6.7
36	Furniture; manufacturing n.e.c.	2.9	2.8	2.3	3.7	4.3	2.3	1.5	1.5	1.4	2.6	1.4	2.4
37	Recycling	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D	Total manufacturing	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Data resource: International Yearbook of Industrial Statistics 2008, UNIDO

Table 3.5 Value added Rate in Selected countriesa

ISIC	Division	Germany[b]	Indian	Japan	Malaysia	Korean	USA	China
	Year	2004	2004	2005	2004	2005	2004	2005
15	Food and beverage	23.5	10.8	36.6	14.1	39.4	44.7	29.1
16	Tobacco products	11.6	42.5	20.7	24.1	56.2	86.2	72.5
17	Textiles	34.0	17.6	43.3	27.0	39.3	42.3	25.6
18/19	Apparel, fur, leather, footwear	26.8	18.5	47.0	32.5	47.8	49.8	28.0
20	Wood products (excl. furniture)	32.2	11.9	38.5	31.5	34.0	42.2	28.0
21	paper and paper products	31.2	19.6	36.7	29.4	36.0	46.1	27.5
22	Printing and publishing	38.9	27.1	47.6	43.9	56.9	61.5	32.1
23	coke, refined petroleum products, nuclear fuel	7.7	14.6	6.0	26.0	18.2	19.5	16.5
24	chemicals and chemical products	33.1	23.8	44.7	29.5	34.0	55.8	27.6
25	rubber and plastics products	36.9	17.3	41.4	27.3	39.1	50.1	25.7
26	Non-metallic mineral products	37.5	29.4	49.4	38.6	46.1	55.2	30.5
27	Basic metals	26.9	23.4	34.6	18.9	30.2	41.0	26.2
28	Fabricated metal products	40.8	17.8	43.7	29.4	39.5	55.0	25.8
29/30	Non-electrical machinery	37.3	21.5	37.0	19.3	37.6	49.7	27.8
31/32	Electrical machinery	35.0	18.6	33.3	20.0	43.8	57.5	22.7
33	Medical, precision and optical instruments	45.9	28.2	42.9	25.5	43.0	66.3	26.4
34/35	Transport equipment	25.2	15.6	27.8	21.4	32.8	38.2	24.4
36	Furniture; manufacturing n.e.c.	35.3	13.1	40.4	29.8	38.1	53.2	26.6

Data resource: International Yearbook of Industrial Statistics 2008, UNIDO

Notes: a : Value added Rate = Value added/Output

b: Value added in factor values is used for Germany

3.05 Extraordinary Growth of Manufacturing Sector of China since 1995

1. China has become the leader of the growth of the manufacturing sector from 1995 to 2007. It can be seen from table 3.6 that there are the trend of declining share of MVA for most of developed countries in the distribution of world MVA. The share for EU 15 and Japan is declined from 25.5% and 20.4% in 1995 to 21.3% and 15.5% in 2007 respectively. While this share for China is increased from 5.1% in distribution of world MVA in 1995 to 11.4% in 2007. Table 3.6 is quoted from a very recent publication of UNIDO which shows the data and fact that had been analyzed from above.

Table 3.6 Distribution of World MVA, 1995-2007

Year	Industrialized countries							Developing countries								
		Europe						Regional groups				Development groups				
	CIS	EU-15	EU-12	Other	Japan	North America	Others	Africa	Latin America	South and East Asia	West Asia and Europe	NICs	Second-generation NICs	Least developed countries	China	others
1995	1.3	25.9	1.2	1.2	20.4	26.5	1.8	0.8	6.9	12.9	1.1	9.7	3.2	0.3	5.1	3.4
1996	1.2	25.0	1.3	1.2	20.5	26.6	1.7	0.8	6.9	13.6	1.2	9.9	3.4	0.3	5.5	3.4
1997	1.1	24.7	1.3	1.2	20.1	27.0	1.7	0.8	7.1	13.8	1.2	9.9	3.4	0.3	5.7	3.6
1998	1.1	24.9	1.3	1.2	18.5	28.5	1.7	0.8	7.1	13.7	1.2	9.7	3.1	0.3	6.1	3.6
1999	1.1	24.5	1.3	1.2	18.0	29.0	1.7	0.8	6.7	14.5	1.2	9.9	3.1	0.2	6.4	3.6
2000	1.1	24.2	1.3	1.1	17.9	28.9	1.7	0.9	6.6	15.1	1.2	10.1	3.1	0.3	6.7	3.6
2001	1.2	24.6	1.4	1.1	17.2	27.9	1.7	0.9	6.7	15.9	1.2	10.1	3.2	0.3	7.4	3.7
2002	1.3	24.2	1.4	1.1	16.6	28.1	1.8	0.9	6.5	17.0	1.2	10.3	3.3	0.3	8.0	3.7
2003	1.4	23.3	1.4	1.0	16.9	27.6	1.8	0.9	6.4	18.0	1.3	10.3	3.4	0.4	8.8	3.7
2004	1.4	22.7	1.5	1.0	16.8	27.6	1.6	0.9	6.5	18.7	1.3	10.6	3.5	0.4	9.1	3.8
2005	1.4	22.1	1.5	1.0	16.6	27.4	1.6	0.9	6.4	19.7	1.4	10.8	3.5	0.4	9.8	3.9
2006	1.5	21.8	1.6	1.0	15.8	27.0	1.6	0.8	6.6	20.9	1.4	11.1	3.7	0.3	10.6	4.0
2007	1.5	21.3	1.6	1.0	15.5	26.7	1.5	0.8	6.6	22.0	1.5	11.3	3.7	0.4	11.4	4.1
Percentage share in world total MVA (at current prices)																
1999	1.0	27.0	1.3	1.3	17.2	28.6	1.7	0.9	6.2	13.7	1.1	9.1	2.9	0.3	6.1	3.5
2000	1.1	24.2	1.3	1.1	17.9	28.9	1.7	0.9	6.6	15.1	1.2	10.1	3.1	0.3	6.7	3.6
2001	1.3	25.1	1.4	1.2	15.7	28.9	1.6	0.9	6.7	16.0	1.2	9.7	3.2	0.3	7.7	3.9
2002	1.4	25.9	1.5	1.3	14.5	28.6	1.6	0.9	6.0	17.1	1.2	9.5	3.5	0.3	8.2	3.7
2003	1.6	27.5	1.7	1.4	14.3	26.2	1.9	0.9	5.6	17.6	1.3	9.2	3.6	0.3	8.7	3.6
2004	1.9	28.2	1.9	1.3	13.9	24.5	2.1	0.8	5.7	18.2	1.5	9.6	3.6	0.4	9.0	3.6
2005	2.3	26.8	2.0	1.3	12.7	24.4	2.0	0.8	6.4	19.7	1.6	10.3	3.7	0.4	10.1	4.0

2. Based upon recent analysis of leading producers of 22 sectors of ISIC Rev 3 by UNIDO, China has become the leading producers in 21 sectors of developing countries in 2006, it is also among the top 3 of 15 sectors globally. Table 3.7 is a summary table through analysis of tables (one sample table is given to be table 3.8) of recent studies by UNIDO.

Table 3.7 Summary Table showing Changing rank of China in the leading producers of various sectors in manufacturing

Item (ISIC)	China's Rank in World Leading countries		China's rank in developing countries	
	2000	2006	2000	2006
Food and Beverage (ISIC15)	3	3	1	1
Tobacco products (ISIC16)	1	1	1	1
Textile (ISIC17)	1	1	1	1
Wearing apparel (ISIC18)	3	1	1	1
Leather, Leather products and footwear (ISIC19)	1	1	1	1
Wood products (exc. Furniture)(ISIC20)	8	4	2	1
Paper and paper products (ISIC21)	4	3	1	1
Printing and publishing (ISIC22)	10	6	1	1
Coke, refined petroleum products, nuclear fuel (ISIC23)	3	2	1	1
Chemicals and chemical products (ISIC24)	4	3	1	1
Rubber and plastic products (ISIC25)	3	2	1	1
Non metallic mineral products (ISIC26)	3	3	1	1
Basic metals (ISIC27)	3	1	1	1
Fabricated metal products (ISIC28)	1	4	1	1
Machinery and equ.n.e.c. (ISIC29)	4	4	1	1
Office, accounting and computing machinery (ISIC30)	8	5	2	1
Electric machinery and apparatus (ISIC31)	3	1	1	1
Radio, television and communication equip (ISIC32)	3	3	1	1
Medical, precision and optical instruments (ISIC33)	9	6	2	1
Motor Vehicles, trailers semi-trailers (ISIC34)	-	-	13	11
Other transport equipment (ISIC35)	2	1	1	1
Furniture; maniefa n.e.c. (ISIC36)	3	3	1	1

Table 3.8 Leading Producers in Selected Divisions, 2000 AND 2006 (Sample table from UNIDO)

World leading countries				Leading developing countries			
2000		2006		2000		2006	
Country or area	Share (%)	Country or area	Share (%)	Country of area	Share (%)	Country or area	Share (%))
Japan	21.6	China	28.2	China	45.2	China	64.9
United States of America	19.4	Japan	19.1	Singapore	10.1	India	6.8
China	12.2	United States of America	11.9	Republic of Korea	7.8	Singapore	5.2
Germany	12.1	Germany	10.3	Brazil	6.5	Republic of Korea	4.5
Italy	3.5	India	2.9	India	5.8	Brazil	4.4
United Kingdom	3.3	Singapore	2.3	Mexico	5.1	China (Taiwan Province)	2.7
France	3.2	France	2.2	China (Taiwan Province)	4.0	Mexico	2.5
Singapore	2.7	Italy	2.1	Puerto Rico	2.8	Puerto Rico	1.4
Republic of Korea	2.1	Brazil	1.9	Turkey	1.6	Iran (Islamic Republic of)	1.0
Brazil	1.7	Republic of Korea	1.9	Malaysia	1.6	Malaysia	1.0
India	1.6	United Kingdom	1.8	Indonesia	1.3	Turkey	0.9
Spain	1.6	Spain	1.5	Argentina	1.1	Indonesia	0.7
Mexico	1.4	China (Taiwan Province)	1.2	Philippines	0.9	Thailand	0.6
Canada	1.2	Mexico	1.1	Thailand	0.9	Argentina	0.5
China (Taiwan Province)	1.1	Russian Federation	0.8	Egypt	0.8	Egypt	0.5
Sum of above	88.7	Sum of above	89.3	Sum of above	95.4	Sum of above	97.6
Radio television and communication equipment (ISIC 32)							
United States of America	61.8	United States of America	69.1	China	30.1	China	43.0
Japan	15.1	Japan	10.1	China (Taiwan Province)	21.6	Republic of Korea	30.3
China	4.1	China	6.8	Republic of Korea	21.2	China (Taiwan Province)	10.7
China (Taiwan Province)	2.9	Republic of Korea	4.8	Malaysia	6.6	Malaysia	4.3
Republic of Korea	2.9	China (Taiwan Province)	1.7	Brazil	3.4	Brazil	1.8
United Kingdom	2.0	Germany	1.4	Mexico	3.1	Philippines	1.7
Germany	1.4	Malaysia	0.7	Philippines	3.0	Thailand	1.7
Canada	0.9	United Kingdom	0.6	Thailand	2.6	Turkey	1.6
Malaysia	0.9	Finland	0.5	Turkey	1.8	Mexico	1.5
France	0.8	France	0.4	India	1.6	India	0.8
Finland	0.7	Brazil	0.3	China (Hong Kong SAR)	1.5	China (Hong Kong SAR)	0.4

Italy	0.7	Italy	0.3	Indonesia	0.7	Indonesia	0.4
Brazil	0.5	Netherlands	0.3	Singapore	0.7	Singapore	0.4
Netherlands	0.5	Philippines	0.3	Argentina	0.4	Iran (Islamic Republic of)	0.3
Israel	0.4	Thailand	0.3	United Arab Emirates	0.4	Argentina	0.2
Sum of above	95.6	Sum of above	97.6	Sum of above	98.7	Sum of above	99.1

. Features of trade of Major Asian Economies and Preliminary Exploration of RTA among China, Japan and Korea, Republic. of

4.01 General Trade is one of the components of economic growth of nations, regions and global society. Comparison of trade structure of China, Japan and selected Asian economies will be given, which will form the basis of preliminary exploration of RTA among them. Trade structure of Hong Kong SAR, Taiwan province of China and Singapore is also given. Which is for the purpose to show the competition and complementarity of trade structure. Comparison of interaction with partner regions and economies is also done to show the growing role of China in trade with its Asian neighbors. Comparison of competition between Asian Economies and China in the U.S. market is presented and explored. Growing competitiveness of trade structure of China is derived form different sources of international organizations. Which also provide the bases of rationality of coordination with China on trade. Finally, some descriptions of preliminary work of RTA among China, Japan and Korea, Republic of is given.

4.02 Trade Structure of China, Japan, Korea, Republic. of and other selected Asian Economies

1. Table 4.1 is a table showing the total amount of import and export in 1995 and 2005 respectively for China, Japan and Korea, Republic of. The share of various sectors in percentage of total export and import is also given. This table provides information on the structural change of trade of these three countries and it also shows the competition of trade of them in various sectors. It can be seen from this table that Japan has a declining share of export nearly in many sectors, but it has a rising share of export in chemical manufacture, road vehicles, professional & scientific instruments etc, China has increased its share of export in seven sectors, general machinery, office and computing machinery, telecommunication machinery, other electric machinery, road vehicle, furniture and metal products. While Korea, Republic of also has its growth of share of export of seven sectors, five of them are similar to China, but it is also competitive on chemical manufactures and other transport equipment. Many information can be derived from this table. It can be served for one of the basis in studying RTA among three countries table 4.2 shows the trade structure of Hong Kong S.A.R., Taiwan province of China and Singapore. A study of this table can show that there is nearly no competition between China and Hong Kong SAR in manufacture, but China will compete with Taiwan province of China and Singapore in market of third country, such as EU or USA due to similarity of several categories of trade structure.

[18]Table 4.1 Comparison of Trade Structure of China, Japan and Korea, Republic of

[18] Source: East Asian Economic Perspectives Vol.18.No.1 Feb.2007 ICSEAD.

Item	Export						Import					
	Japan		China		Korea, Republic of		Japan		China		Korea, Republic of	
	1995	2005	1995	2005	1995	2005	1995	2005	1995	2005	1995	2005
Total Amount(billion U.S.D.)	442.9	594.9	148.8	762	125.1	284.4	336.1	515.9	132.1	660	135.1	261.2
Sector share of total in %												
Agricultural products			7.9	3.14	2.25	1.06	15.35	9.91	6.9	2.05	5.06	4.25
Crude materials excluding fuels		1.14	2.92		1.43	1	10.2	6.36	7.47	10.62	8.55	5.83
Mineral fuels			3.59	2.32	1.99	5.54	16.06	25.81	3.92	9.76	14.17	25.89
Chemical manufactures	6.67	8.59	6.09	4.62	7.09	9.62	7.11	7.29	13	11.58	9.55	9.21
General machinery	18.43	17.52	3.2	5.48	5.78	7.06	3.92	5.01	20.65	10.25	16.29	8.81
Office & computing machinery	8.46	4.1	3.23	14.53	3.97	6.24	4.84	5.37	2.16	5.42	2.64	2.7
Telecommunications mach.,etc.	6.39	5.66	5.65	12.45	7.1	13.27	2.72	3.49	5.77	4.45	2.26	2.56
Other electrical machinery	16.74	13.76	6.42	10.17	22.79	15.09	6.39	8.13	7.38	20.95	10.77	14.99
Road vehicles	17.63	20.74	1.81	2.85	8.09	13.12	3.73	2.66	2.03	1.86	1.41	1.52
Other transport equipment	2.66	2.45			4.74	6.19			2	1.14	3.21	1
Textiles	1.62	1.16	9.45	5.45	9.85	3.65	1.89	1.17	8.46	2.36	3.07	1.4
Apparel			16.27	9.75	3.98		5.59	4.38				1.12
Leather products					1.45				1.75			
Footwear			4.22	2.42	1							
Wood products							1.1					
Furniture			1.18	2.19								
Paper products									1.68			
Rubber products	1.2	1.24			1.21							
Non-metallic mineral manufac.	1.2	1.09	2.3	1.79			1.8	1.05			1.14	1.28
Iron & steel	3.79	4.39	3.71	2.62	4.43	5.1	1.76	1.43	4.95	3.95	4.89	5.81
Non-ferrous metals		1.12	1.3	1.44		1.49	3.17	2.5	2.03	2.59	3.42	3.01
Metal products	1.63	1.52	3.03	3.47	2.93	1.65		1.32	1.33		1.13	1.14
Professional &scientific instru.	2.48	3.3		2.22		3.48	1.67	2.48	1.64	6.26	3.16	3
Photographic & optical, watches	3.01	3.05	2				1.23	1.2	1.44	1.13	1.55	2.05
Miscellaneous manufactures	2.36	2.52	11.81	7.94	3.9	1.92	4.46	4.3	2.1	1.56	1.94	2.17
Not classified	2.14	4.64			1.99		2.24	1.83			2.26	

2. Comparison of trade structure of Hong Kong SAR, Taiwan Province of China and Singapore

[19]Table 4.2 Comparison of Trade Structure of Selected NICs

Item	Export						Import					
	Hong Kong SAR		Taiwan Province of China		Singapore		Hong Kong SAR		Taiwan Province of China		Singapore	
	1995	2005	1995	2005	1995	2005	1995	2005	1995	2005	1995	2005
Total Amount(billion U.S.D.)	173.9	292.1	111.7	198.4	118.2	226.3	196.1	300.2	103.5	182.6	124.4	197.1
Sector share of total in %												
Agricultural products			3.45	1.11	1.2		5.35	2.93	4.76	3.21	4.5	2.81
Crude materials excluding fuels			1.81	1.32			2.09		6.29	3.94	1.18	
Mineral fuels				4.46	8.19	13.8	1.9	2.68	6.89	15.39	8.06	17.75
Chemical manufactures			6.76	10.19	3.36	9.02	7.34	6.09	13.3	12.57	6.46	6.23
General machinery			8.43	7.33	40.44	2.69	5.65	4.67	11.53	10.57	10.48	55.82
Office & computing machinery	1.33		14.51	7.84	2.3	9.09	4.53	10.72	2.38	3.04	10.59	8.77
Telecommunications mach., etc.			5.62	6.01	20	2.57	9.62	12.67	1.91	2.62	7.39	9.82
Other electrical machinery	2.37		14.93	26.37	6.02	9.84	12.54	22.77	18.56	21.16	24.48	6.5
Road vehicles			4.42	3.15	11.47		3.04		4.44	2.14	2.16	26.58
Other transport equipment							1.07		1.35	1.66	2.79	1.95
Textiles	1.04		10.66	31.14			8.65	35.01	1.73	22.2	1.69	2.2
Apparel	5.52	2.48	2.92	4.78			6.5	4.6			1.32	15.47
Leather products							1.41	6.16				
Footwear			1.26				3.28	1.43				1.07
Wood products								1.7				
Furniture			1.57									
Paper products							1.69		1.32			
Rubber products												
Non-metallic mineral manufac.							2.89	3.71	1.16	1.35	1.51	1.49
Iron & steel			1.96	4.44			1.91	1.28	6.35	4.72	2.22	1.79
Non-ferrous metals			1.21	1.53			1.6	1.6	4.6	3.55	2.05	1.34
Metal products			5.56	4.01			1.6	1.14	1.09		1.7	1.41
Professional &scientific instru.				6.41				1.71	2.92	3.92	1.98	2.43
Photographic & optical, watches	1.17		1.27				4.07	2.72	1.09	2.65	1.89	1.28
Miscellaneous manufactures	1.64		8.08	5.08	1.52	2.27	9.25	7.56	2.12	1.86	4.11	2.82
Not classified	83.08	94.04			41.53	46.13	2.04		3.22	1.52	1.18	1.27

4.03 Change of Trade Interaction with Partner Regions and Economies

[19] Source: Same as table 4.1

It can be seen from Table 4.3 to 4.6 that there is greater trade interaction within Asian region from 1995 to 2005. Generally, there are decreasing share of trade interaction with developed economies, Japan, U.S.A. and industrial Europe. And there are increasing share of trade interaction with China for most of the major economies in Asia.

[20]Table 4.3 Trade Interaction with Partner Regions and Economies 1995, Import

	China	Japan	Korea, Republic of	Hong Kong SAR	Taiwan prov.of China	Singapore	Indonesia	Malaysia	Thailand	Philippines	Industrial Europe	U.S.A.
China	132.1	21.96	7.79	6.50	11.19	2.57	1.55	1.57	1.22	0.21	16.98	12.20
Japan	10.72	336.1	5.14	0.81	4.27	2.04	4.23	3.14	3.01	1.03	16.11	22.58
Korea, Republic of	5.48	24.13	135.1	0.62	1.90	1.60	2.46	1.86	0.69	0.45	14.71	22.51
Hong Kong SAR	35.57	14.65	5.18	196.1	8.52	5.15	0.83	1.90	1.39	0.44	12.12	7.87
Taiwan prov.of China	2.99	29.23	4.18	1.78	103.6	2.86	2.08	2.85	1.43	0.60	15.84	20.06
Singapore	3.25	21.15	4.34	3.30	4.11	124.5	-	15.48	5.16	0.88	14.83	15.05
Indonesia	3.43	21.14	5.62	0.63	4.18	5.43	43.6	1.76	1.69	0.19	19.87	10.91
Malaysia	2.23	27.49	4.13	2.17	5.13	12.47	1.58	77.0	2.66	0.60	17.43	16.28
Thailand	2.96	30.55	3.50	1.05	4.83	5.88	0.95	4.57	70.8	0.82	17.68	12.02
Philippines	2.32	22.13	5.02	4.86	5.42	5.74	2.18	2.19	1.50	28.5	11.31	18.91

[21]Table 4.4 Trade Interaction with Partner Region and Economies 2005 Import

	China	Japan	Korea, Republic of	Hong Kong SAR	Taiwan prov.of China	Singapore	Indonesia	Malaysia	Thailand	Philippines	Industrial Europe	U.S.A.
China	660.0	15.21	11.64	1.85	11.32	2.50	1.28	3.04	2.12	1.95	11.64	7.51
Japan	21.03	515.9	4.73	0.30	3.50	1.30	4.04	2.84	3.02	1.49	12.30	12.68
Korea, Republic of	14.79	18.53	261.2	0.78	3.08	2.04	3.13	2.30	1.03	0.89	10.93	11.79
Hong Kong SAR	44.96	11.01	4.42	300.2	7.21	5.80	0.64	2.45	2.02	1.71	8.74	5.16
Taiwan prov.of China	11.00	25.22	7.25	1.16	182.6	2.72	2.49	2.86	1.58	1.53	10.44	11.59
Singapore	10.26	9.61	4.30	2.10	6.66	200.1	5.22	13.66	3.76	2.32	12.45	11.72
Indonesia	8.38	9.90	4.11	0.42	1.92	13.58	69.7	3.08	4.94	0.46	8.76	5.56
Malaysia	11.50	14.52	4.96	2.49	5.53	11.71	3.82	114.6	5.27	2.81	12.54	12.91

[20] Note: Number is value in billion U.S.D., the remaining figures are share of total import in % .
Source: Same as table 4.1.

[21] Note: Number is value in billion U.S.D., the remaining figures are share of total import in %.
Source: Same as table 4.1.

	China	Japan	Korea, Republic of	Hong Kong SAR	Taiwan prov.of China	Singapore	Indonesia	Malaysia	Thailand	Philippines	Industrial Europe	U.S.A.
Thailand	9.44	22.05	3.28	1.27	3.81	4.55	2.65	6.85	118.2	1.59	10.08	7.38
Philippines	6.50	17.10	4.85	4.25	7.34	7.94	2.31	3.77	3.53	47.0	8.26	17.49

[22]Table 4.5 Trade Interaction with Partner Region and Economies 1995 Export

	China	Japan	Korea, Republic of	Hong Kong SAR	Taiwan prov.of China	Singapore	Indonesia	Malaysia	Thailand	Philippines	Industrial Europe	U.S.A.
China	148.8	19.13	4.50	24.19	2.08	2.35	0.97	0.86	1.18	0.69	13.29	16.62
Japan	4.96	442.9	7.05	6.26	6.52	5.20	2.25	3.79	4.45	1.61	16.66	27.55
Korea, Republic of	7.31	13.63	125.1	8.54	3.10	5.35	2.37	2.36	1.94	1.19	13.81	19.47
Hong Kong SAR	33.28	6.09	1.62	173.9	2.67	2.84	0.61	0.90	0.93	1.16	15.84	21.77
Taiwan prov.of China	0.34	11.78	2.30	23.38	111.7	3.95	1.67	2.60	2.75	1.48	13.51	23.65
Singapore	2.33	7.80	2.74	8.57	4.07	118.3	-	19.18	5.77	1.63	13.83	18.26
Indonesia	3.83	27.06	6.42	3.65	3.85	8.29	45.4	2.17	1.55	1.30	15.08	13.92
Malaysia	2.65	12.68	2.79	5.35	3.14	20.32	1.32	73.8	3.92	0.91	14.39	20.71
Thailand	2.91	16.79	1.42	5.17	2.40	14.03	1.44	2.75	56.4	0.73	16.07	17.86
Philippines	1.23	15.75	2.54	4.72	3.26	5.71	0.74	1.81	4.58	17.4	17.82	35.79

Table 4.6 Trade Interaction with Partner Regions and Economies 2005 Export

	China	Japan	Korea, Republic of	Hong Kong SAR	Taiwan prov.of China	Singapore	Indonesia	Malaysia	Thailand	Philippines	Industrial Europe	U.S.A.
China	762.0	11.02	4.61	16.34	2.17	2.18	1.10	1.39	1.03	0.62	18.15	21.42
Japan	13.46	594.9	7.84	6.04	7.32	3.10	1.55	2.11	3.77	1.52	14.39	22.85
Korea, Republic of	21.77	8.45	284.4	5.46	3.82	2.60	1.77	1.62	1.19	1.13	14.06	14.59
Hong Kong SAR	44.65	5.24	2.24	292.1	2.32	2.07	0.43	0.83	1.03	0.90	14.75	15.92
Taiwan prov.of China	21.99	7.62	2.96	17.15	198.4	4.05	1.19	2.16	1.93	2.18	10.68	14.57
Singapore	8.60	5.46	3.51	9.37	3.91	229.7	9.62	13.23	4.09	1.82	11.89	10.39
Indonesia	7.78	21.07	8.27	1.74	2.89	9.15	85.7	4.01	2.62	1.66	11.75	11.52
Malaysia	6.60	9.35	3.36	5.85	2.78	15.61	2.36	141.0	5.38	1.40	11.33	19.69
Thailand	8.30	13.65	2.04	5.57	2.45	6.77	3.60	5.16	110.1	1.86	13.62	15.46
Philippines	9.89	17.47	3.37	8.10	4.58	6.56	1.16	5.96	2.83	41.2	16.52	18.02

4.04 Competitiveness of exports of China in Manufacture in developing countries-one study

[22] Note: Number is value in billion U.S.D., the remaining figures are share of total export in %.
Source: Same as table 4.1.

of UNIDO

1.A Study had been done by UNIDO on the rank of competitiveness of exports of developing countries in various categories of manufactures, all manufactures, resource based, low technology based, medium technology and high technology based. The study shows that China rank No.1 in export of all manufactures and low technology based manufactures in the year 2000. It ranked No.3 and No.4 respectively in the medium technology and high technology manufactures Table 4.7(a) and 4.7(b) provide the detail information of this study of comparison.

[23]Table 4.7(a) Leading developing country exporters of manufactures, 1990 and 2000

Rank	All manufactures		Resource based	
	1990	2000	1990	2000
1	Taiwan,Prov.of China	China	Singapore	China
2	Korea, Rep.of	Korea, Rep of	Brazil	Singapore
3	Singapore	Taiwan	Malaysia	Korea
4	China	Mexico	China	Brazil
5	Hong Kong, SAR	Singapore	Indonesia	Indonesia
6	Brazil	Malaysia	Saudi Arabia	India
7	Malaysia	Thailand	India	Saudi Arabia
8	Thailand	Indonesia	Korea	Malaysia
9	Indonesia	Brazil	Taiwan	Thailand
10	Mexico	India	Thailand	Venezuela
11	India	Philippines	Argentina	Mexico
12	Saudi Arabia	Turkey	South Africa	South Africa
13	Turkey	Hong Kong,SAR	Mexico	Chile
14	Argentina	South Africa	Algeria	Taiwan
15	South Africa	Saudi Arabia	Chile	Argentina
16	Chile	Argentina	Libya	Botswana
17	Algeria	Chile	Philippines	Ukraine
18	Philippines	Algeria	Turkey	Algeria
19	Pakistan	Venezuela	Peru	Bahrain
20	Venezuela	Pakistan	Hong Kong,SAR	Turkey

Table 4.7(b) Leading developing countries exporters of manufactures 1990 and 2000

Rank	Low technology		Medium technology		High technology	
	1990	2000	1990	2000	1990	2000
1	Taiwan,Prov.of China	China	Korea,Rep.of	Mexico	Singapore	Singapore
2	Korea	Taiwan,Prov.of China	Taiwan,Prov.of China	Korea,Rep.of	Taiwa,prov.of China	Taiwa, Prov.of China
3	China	Korea	China	China	Korea, Rep.of	Korea, Rep.of
4	Hong Kong,SAR	Mexico	Singapore	Taiwan	Malaysia	China
5	Thailand	India	Brazil	Singapore	Hong	Malaysia

[23] Source: Industrial Development Report 2004 UNIDO.

					Kong,SAR	
6	India	Indonesia	Mexico	Malaysia	Thailand	Mexico
7	Turkey	Turkey	Hong Kong,SAR	Thailand	China	Philippines
8	Singapore	Thailand	South Africa	Brazil	Brazil	Thailand
9	Brazil	Hong Kong,SAR	Malaysia	Indonesia	Mexico	Indonesia
10	Indonesia	Singapore	Thailand	South Africa	India	Brazil
11	Pakistan	Malaysia	Turkey	Turkey	Philippines	Hong Kong,SAR
12	Malaysia	Pakistan	India	India	Turkey	India
13	Mexico	Brazil	Saudi Arabia	Argentina	Indonesia	Turkey
14	Macao	Philippines	Indonesia	Philippines	South Africa	Costa Rica
15	Philippines	Tunisia	Argentina	Saudi Arabia	Argentina	South Africa
16	Argentina	Morocco	Syria	Hong Kong,SAR	Morocco	Argentina
17	Tunisia	South Africa	Venezuela	Colombia	Tunisia	Morocco
18	Bangladesh	Argentina	Morocco	Venezuela	Jordan	Colombia
19	Morocco	Macao	Philippines	Chile	Guatemala	Tunisia
20	Syria	Colombia	Tunisia	Tunisia	Chile	Oman

2. Competition between Asian Economies and China in the U.S. market.
There is a study by international scholar[24] pointed out the rationality and various aspects of cooperation in East Asia: Competition between Asian Economies and China in the U.S. market has been pointed out. which is shown in table 4.8. This competition is analyzed based upon the overlap with China's exports.

Table 4.8 Competition between Asian Economies and China in the U.S. Market (Selected years 1990-2000)(percent of overlap with China's exports)

Economy	1990	2000
Japan	3.0	16.3
Korea, Rep of	24.0	37.5
Taiwan China	26.7	48.5
Hongkong China	42.5	55.9
Singapore	14.8	35.8
Indonesia	85.3	82.8
Malaysia	37.1	48.7
Philippines	46.3	46.1
Thailand	42.2	65.4

It can be seen from table 4.8 that there is increase of competition in the U.S. market between China and Japan, Korea, Repub. of and other Asian countries from 1990 to 2000 due to overlap of trade structure.

[24] Note: Innovative Ease Asia-The Future of Growth by: Shahid Yusuf 2003 The World Bank.

4.05 China is a leading economy in S-S trade-Study by UNCTAD

A recent study by UNCTAD shows that China has become a leading economy in export and import of S-S trade.Table 4.9 shows that China ranked No.1 in export of all commodities, manufactures and agricultural products, it ranked No.2 in export of fuels, mineral and metals in S-S trade. China is also ranked No.1 in import of all commodities and agricultural products of S-S trade, it ranked No.2 in import of manufactures and fuels, minerals and metals. Table 4.9 provides the detail information of top 10 economies in S-S trade.

Table 4.9 Top 10 Economies in S-S Trade

Rank	Total merchandise	Manufactures	Fuels, mineral and metals	Agricultural products
Leading exporting economies				
1	China (19.7)	China (22.4)	Singapore (9.8)	China (11.5)
2	Hong Kong (China)(14.2)	Hong Kong (China)(17.2)	China (9.7)	Argentina (10.6)
3	Rep.of Korera (11.1)	Rep.of Korea (13.2)	Indonesia (7.3)	Brazil (10.2)
4	Singapore (9.4)	Taiwan Prov.of China(11.2)	Nigeria (6.4)	Malaysia (9.6)
5	Taiwan Prov.of China (9.3)	Singapore (9.7)	Iran, Islamic Rep.of(6.2)	Thailand (8.2)
6	Malaysia (6.0)	Malaysia (5.6)	Venezuela (5.9)	Indonesia (6.5)
7	Thailand (4.1)	Thailand (3.9)	Malaysia (5.8)	India (5.5)
8	India (3.4)	India (3.0)	Rep.of Korea (5.0)	Hong Kong (China)(5.1)
9	Brazil (3.3)	Brazil (2.4)	India (4.4)	Chile (2.6)
10	Indonesia (3.1)	Indonesia (2.1)	Chile (3.6)	Singapore (2.5)
Memo item:				
Share of top 10	83.5	90.7	64.2	72.3
Leading importing economies				
1	China (21.0)	Hong Kong(China)(23.3)	Rep.of Korea (20.4)	China (17.9)
2	Hong Kong (China)(17.7)	China (21.9)	China (19.1)	Hong Kong (China)(7.4)
3	Rep.of Korera (8.9)	Singapore (8.1)	Taiwan Prov.of China(8.7)	Rep.of Korea (7.2)
4	Singapore (7.7)	Rep.of Korea (5.7)	Singapore (8.2)	India (6.1)
5	Taiwan Prov.of China (5.9)	Taiwan Prov.of China(5.4)	Thailand (5.2)	Malaysia (4.2)
6	Malaysia (4.6)	Malaysia (5.0)	Indonesia (4.1)	Brazil (3.9)
7	Thailand (4.0)	Mexico (4.4)	Brazil (4.0)	Thailand (3.6)
8	Mexico (3.5)	Thailand (3.6)	Hong Kong (China)(3.3)	Saudi Arabia (3.6)
9	India (2.5)	India (2.3)	Turkey (3.2)	Singapore (3.4)
10	Brazil (2.2)	Philippines (1.9)	Malaysia (2.9)	Indonesia (3.0)
Memo item:				
Share of top 10	77.8	81.7	79.2	60.4

4.06 Preliminary Exploration of RTA among China, Japan and Korea, Repub.of

There are on going studies and preliminary discussion of Regional Trade Agreement among China, Japan and Korea, Rep.of A lot of indepth studies should be done for such RTA. The following is a part of preliminary studies done by our Center.

1. Rationality to Study FTAs among China, Japan and Korea, Republic of

It can be seen from table 4.10 and 4.11 that there is rapid growth of trade among China, Japan and Korea, Republic of. There is also significant increase of importance of China in the share of export market of Japan and Korea, Republic of. It is increased from 4.96% and 7.31% respectively for them in 1995 and to 13.46% and 21.77% in 2005. These three countires together also have a high share of their export to global total compared to other trade blocks. Table 4.10 shows the facts.

Table 4.10 Trade share of major trade blocks[25]

	Share of Export within blocks (%)			Share to export to total global export (%)
	1995	2000	2005	2005
EU 25	65.7	67.5	66.8	39.4
NAFTA	46	55.6	55.8	14.5
Mercosur	20.5	21	12.9	1.6
ASEAN	25.5	24	24.9	6.4
China, Japan, Korea, Rep.of	16	17	20.2	16.2

2. International Competitiveness of major Industries of China, Japan and Korea, Repub.of

International competitiveness of major industries is calculated and compared by RCA index.

$$RCA=\frac{x_g^k / x_w^k}{x_j / x_w}$$

in which: x export; k Category of export goods

j country concerned; w global total

data based upon HS 2002

Table 4.10 presents the RCA index of major industrial sector of three countries

Table 4.11[26] International Competitiveness of major Industrial Sector of three Countries (RCT Index 2002-2005)

	China		Japan		Korea, Republic of	
	2002	2005	2002	2005	2002	2005
Agriculture	0.46	0.38	0.05	0.05	0.15	0.13
Fishery	1.42	1.44	0.19	0.26	0.66	0.47
Petro-chemical	0.5	0.52	0.76	0.83	0.74	0.84
Textile	3.05	3.09	0.31	0.3	1.72	1.05
Iron and Steel	0.85	1.03	1.33	1.31	1.35	1.4
Machinery	1.27	1.38	1.35	1.41	1.14	0.95
Electronics	1.41	1.59	1.5	1.45	1.88	1.99

[25] Source: Reference1 .

[26] Source: Reference1

Automobile	0.18	0.23	2.16	2.26	1.02	1.42

3. Analysis of comparative Advantage of Each country in Intra-regional Trade in East Asia

To simplify the calculation, the comparative advantage of different industrial sectors of each country in intra-regional trade is studied within the Northeast Asian region. RRCA (Regional Revealed Comparative Advantage) index is used for measurement. The results of calculation are shown in table 4.12.

Table 4.12 Comparison of Trade competitiveness of three countries in East Asian Region[27]

	2002			2005		
	China	Japan	Korea Republic of	China	Japan	Korea Republic of
Agriculture	1.95	0.12	0.6	2.03	0.11	0.49
Fishery	1.82	0.13	0.85	2.03	0.16	0.44
Petro-ehemical	0.47	1.31	1.54	0.54	1.31	1.33
Textile	1.72	0.35	0.67	1.8	0.31	0.43
Iron and Steel	0.55	1.71	0.67	0.92	1.56	1.22
Machinery	0.77	1.13	1.24	0.85	1.18	0.86
Electronics	0.95	1.33	0.53	0.82	1.01	1.13
Automobile	0.58	1.92	0.24	0.5	1.15	1.2

4. Analysis given in this section shows that competition is unavoidable even in regional cooperation. RTAs is one aspect to look on cooperation in regional trade. But the coverage of RTAs can be very broad, tariff reduction is only the major item and initiative covered in many RTAs. In a broad coverage of RTAs, they can include services, rule of origin, contingency measures,(Arti-dumping, countervailing duties and safeguard), intellectual property rights, trade facilitation, competition, investment, government procurement, dispute settlement, labor standards, environmental standards, labor mobility, standard related measures (technical barrier to trade etc.) technology transfer, capacity building etc. The rationality of cooperation on trade will be explored in broader sense in next part.

.Globalization and Regionalism will both direct to the Prosperity of Global Society

5.01 General Theories of competition are well established and documented in abundant economic literatures. But there is nearly no niche for theories on “coordination”. The long-term scenario study of the world economy 1990-2015 had been studied by the Central Planning Bureau of Netherland, scenario of free market

[27] Source: Reference 1.

perspective, scenario of coordination perspective and scenario of equilibrium perspective have been proposed. And it is stated that "the coordination perspective is based primarily on the views of Keynes, i.e. it is in the public interest to correct a certain short-sightness, and it is also rational for government intervention. This argument will be useful in the exploration of the theme of this paper, i.e. RTAs which is widely distributed since 1990s are from the initiatives of the government rather than driven purely through market force. Several important studies have been implemented to study RTAs from regional initiative. Therefore, RTAs can represent coordination among governments to certain extent. Regional cooperation has been studied by International organizations in recent years, A distinction is made on the two words "regionalism" and "regionalization", the former is policy induced regional integration which involves formal economic cooperation arrangements (i.e. with the involvement of the government) while the later is market driven integration which is spurred by regional growth dynamics, the emergence of international production networks and related FDI flows. These two types of regional integration should work together. This view will be further elaborated and explored in this part.

The trend of rapid growth of RTAs since the 1990s especially the recognition of the trend and benefits of south south trade. The study and conclusions from existing international studies will be used to be empirical basis of rationality to transform "trade competition" into "trade coordination" with China through RTAs.

5.02 Proliferation of RTAs and Evolution of Concepts on Regionalism

1. Proliferation of RTAs

There are rapid growth of Regional Trade Agreements since 1990. It is studied in 2005 by the World Bank in its publication of Global Economic Prospects 2005 that the number of RTA in force rose from 50 to nearly 230. Fig.5.1 shows the trend of growth.

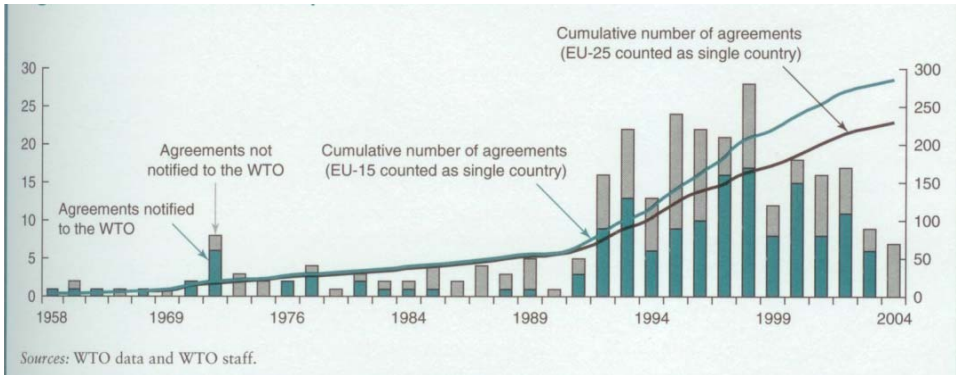
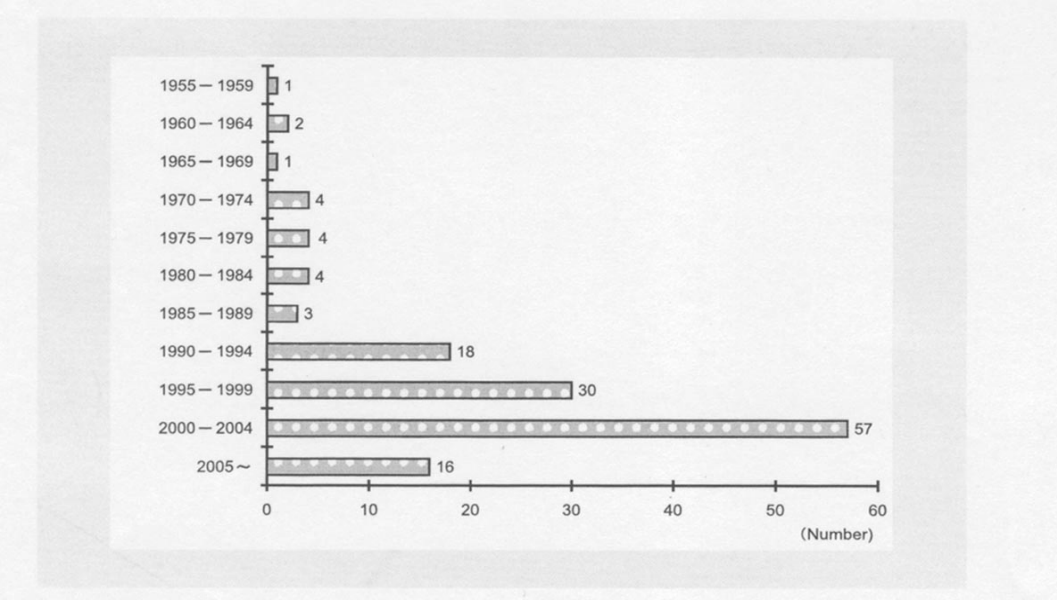


Fig.5.1[28] Growth Pattern of RTAs

A very recent study by joint effort of UNCTAD and JETRO gives different figures of RTAs from the World Bank. It is stated that "As of July 2007, there were 140 regional trade agreements (RTAs) in effect worldwide. This stands in contrast with the situation in 1989 when there were only 19 RTAs……"Fig.3.2 gives the growth of RTAs from that report.

[28] Source: Global Economic Prospects 2005-Trade, Regionalism, and Development.



[29]Fig.5.2[30] Worldwide growth of RTAs

In spite of difference of number of RTAs in these two figures, (It is also estimated to be 159 in 2007 in Trade and Development Report 2007 of UNCTAD) but they both show the trend of rapid growth of RTAs since 1990's, even after the formal establishment of WTO in 1995.

2.The Rationality of RTAs and Evolution of Concepts

(1) Various aspects of RTAs had been analyzed in the World Bank study. "Trade-Related Regional Cooperation Agreements" has been analyzed in that study, it is pointed out that "countries can benefit from other forms of cooperation that are linked to trade directly through RTA arrangements……in the presence of economies of scale or inter-country externalities, market solutions to problems are not necessarily the best, and regional cooperation can often pay large dividends.

(2) In the above World Bank study, emphasis is put on "Making Regionalism Complementary to Multilateralism", it states that "At the Multilateral level, the Doha Agenda, negotiations are the best instruments for most developing countries to reduce the discrimination they face from the prevailing web of RTAs".

(3) RTAs is confirmed further in Trade and Development Report 2007 of UNCTAD, This report titled "Regional cooperation for development." Raised the concept of "New Regionalism". It denotes a departure from multilateralism, and has grown out of a sense of frustration of some governments at the slow progress in multilateral trade negotiations. This "New Regionalism" believes that a number of bilateral "regional" agreements could serve as a better vehicle for advancing laws and institutions aimed at promoting the internationalization of investment and production. This "New

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[29] Source: From South Trade in Asia: The Role of Regional Trade Agreement.

[30] Source: WTO

Notes:

1.Of the 194 RTAs listed on the WTO website(listing signifies that GATT or the WTO has been notified of the agreement and that these RTAs are enforced), we have excluded 53 as duplicates due to new participants in existing FTAs.

2.The period is based on the date of the agreement. If that is unclear. The date of notification to the GATT or the WTO is used.

Regionalism" by passes multilateral institutions and arrangements, as governments pursue economic objectives and use instruments for which no agreements has been reached at the multilateral level.

It also perceive globalization as a process whereby access to markets of the North and attracting FDI from developed country investors is key to integration of a global economy.

5.03 Further Evolution of Concept of RTA-South-South Trade Agreements

1. Issues of North-South FTAs

Due to the involvement of reciprocal commitments, the principle in North-South FTAs places developing countries at a disadvantage against their counterpart developed countries, as the developing countries typically enter into the liberalized trade relationship at a less advanced stage of domestic industrial development, implying lower capacities of supply and marketing. Also, the possibilities of developing countries to be benefited from the provisions of these FTAs are limited. In order to comply with the principle of reciprocity, developing countries are also forced to cut tariffs from higher level, especially on industrial products.

2. Study of S-S Trade by UNCTAD

South-South trade had been studied in Trade and Development Report 2005 of UNCTAD. The major conclusions from that study are abbreviated as follows:

(1)The tradition of export dependence of developing countries to developed countries and the dependence of export of primary products cannot support their economic growth effectively.

(2) The importance of developing countries in world market is increasing all the time

(3) Growth rate of S-S trade especially growth of trade of manufactured products has surpassed the growth of world trade and growth of trade of developing countries .

(4)S-S trade is concentrated mostly in few economies of East Asia. Fig.5.1(a)(b)(c)is the trade matrix of global merchandise trade based on major product categories.

Fig.5.1 (a) Global Trade Matrix (1965)[31]

Exporter	Importer					
	Developed Countries		Developing Countries		Within which: First Tier NIE and China	
	Total Billion U.S.D.	Share (%)	Total Billion U.S.D.	Share (%)	Total Billion U.S.D.	Share (%)
Developed Countries						
All goods	87.0	67.2	29.3	22.6	2.8	2.2
Manufactured goods	55.3	64.5	22.6	26.4	2.0	2.3
Primary products	30.4	75.2	6.2	15.2	0.8	2.0
Developing Countries						

[31] Source: Trade and Development Report 2000. UNCTAD.

All goods	17.6	68.9	6.4	25.1	1.1	4.3
Manufactured goods	2.0	53.4	1.6	43.8	0.2	5.1
Primary products	15.6	71.7	4.7	21.8	0.9	4.1
Within which: First Tier NIE and China						
All goods	1.5	53.7	1.3	47.1	0.2	7.7
Manufactured goods	0.9	55.5	0.7	47.2	0.1	6.7
Primary products	0.6	51.9	0.5	46.3	0.1	9.3

Fig.5.1(b) Global Trade Matrix (1985)[32]

Exporter	Importer					
	Developed Countries		Developing Countries		Within which: First Tier NIE and China	
	Total Billion U.S.D.	Share (%)	Total Billion U.S.D.	Share (%)	Total Billion U.S.D.	Share (%)
Developed Countries						
All goods	851.3	67.5	279.	222.1	79.1	6.3
Manufactured goods	616.9	67.0	221.2	24.0	63.6	6.9
Primary products	213.8	71.6	50.5	16.9	13.8	4.6
Developing Countries						
All goods	217.8	60.3	97.0	26.9	38.3	10.6
Manufactured goods	74.3	58.3	43.0	33.7	17.0	13.3
Primary products	131.9	59.4	40.3	18.2	12.7	5.7
Within which: First Tier NIE and China						
All goods	59.5	54.7	45.7	42.0	23.3	21.4
Manufactured goods	42.5	58.0	24.8	33.8	12.2	16.6
Primary products	6.7	25.5	7.9	30.1	2.8	10.7

Fig.5.1 (c) Global Trade Matrix (2003)[33]

Exporter	Importer					
	Developed Countries		Developing Countries		First Tier NIE and China Within which: First Tier NIE	
	Total Billion U.S.D.	Share (%)	Total Billion U.S.D.	Share (%)	Total Billion U.S.D.	Share (%)
	2003 year					
Developed Countries						
All goods	3555.1	74.71	1033.4	21.7	418.0	8.8
Manufactured goods	2829.7	74.0	864.3	22.6	349.7	9.1
Primary products	614.3	78.0	136.2	17.3	53.9	6.8
Developing Countries						
All goods	1141.7	53.8	921.4	43.4	510.4	24.1

[32] Source: Same as Fig.5.1(a).
[33] Source: Same as fig.5.1 (a).

Manufactured goods	879.1	54.4	714.3	44.2	429.2	26.5
Primary products	258.3	52.6	200.2	40.8	79.1	16.1
Within which: First Tier NIE and China						
All goods	545.4	47.5	586.0	51.0	385.1	33.5
Manufactured goods	511.6	48.6	526.8	50.1	350.6	33.3
Primary products	31.6	35.6	54.6	61.6	33.7	37.9

It can be seen clearly from tables 5.1(a)-5.1(c) that the share of export from developing countries to developed countries is decreased from 68.9% (total merchandise trade) in 1965 to 53.8% (Total merchandised trade) in 2003. Its share in primary product is decreased significantly, i.e. form 71.7% in 1965 to 52.6% in 2003 and there is generally the trend of growth of share in manufactured exports. But the share of export from developing to developing countries is increased significantly, it is increased from 25.1% (total merchandise trade) in 1965 to 43.4% in 2003, especially, the share of primary products is increased from 21.8% in 1965 to 40.8% in 2003. It can also be seen from these table the increasing role in global trade played by First Tier[34] NIE and China, compare the number of them in last column in 1965 and 2003 can provide strong evidence of the growing importance of their role in changing global trade.

Table 5.2 provides further the various features of growing of share of S-S trade in four different periods. The abundance of data provided in table 5.1 and table 5.2 will support further the joint study done by UNCTAD and JETRO completed in 2008 which will be abbreviated in next section.

Table 5.2 S-S trade within the World Trade 1970-2003[35]

	1970-1980	1980-1990	1990-2000	2000-2003	Memorandum Item 1970-2003
Growth Rate of S-S trade (%)					
Total	26.7	5.8	10.9	7.9	13.3
Agricultural products	20.5	4.9	7.9	7.3	9.4
Fuel, minerals and metal	30.2	-8.8	7.8	-0.9	7.6
Manufactured products	26.4	16.9	12.1	9.6	18.3
Share of S-S trade of total exports of Developing countries (%)					
Total	22.9	29.5	39.1	40.9	31.6
Agricultural products	22.3	30.6	39.6	43.1	32.0
Fuel, minerals and metal	20.1	21.1	30.7	36.2	25.2
Manufactured products	34.5	36.5	41.6	41.9	37.9
Share of S-S trade of total exports of Developing to Developed countries (%)					

[34] Note: First tier of NIE is defined by UNCTAD to be Hongkong SAR, Korea republic of , Singapore and Taiwan province of China.

[35] Source: Trade and Development Report 2005 UNCTAD.

Total	35.3	48.0	71.2	74.3	53.8
Agricultural products	34.5	52.5	71.6	80.9	55.5
Fuel, minerals and metal	30.9	32.4	60.9	71.5	44.4
Manufactured products	60.1	64.4	74.3	73.8	66.8
Share of S-S trade of total imports of Developing countries (%)					
Total	26.1	32.4	37.8	43.9	33.1
Agricultural products	37.9	36.3	42.0	44.9	39.4
Fuel, minerals and metal	74.1	72.9	67.2	66.8	70.9
Manufactured products	11.6	20.1	33.1	39.8	23.3
Share of S-S trade to total imports of Developing countries from Developed Countries					
Total	38.0	51.5	64.7	85.1	54.4
Agricultural products	65.7	62.2	76.8	87.1	70.4
Fuel, minerals and metal	394.2	396.2	261.3	327.9	344.3
Manufactured products	13.8	27.4	51.8	69.6	34.7
Memorandum Global Total Exports (Growth rate%)					
Total	20.2	6.7	7.4	4.5	9.2
Agricultural	17.1	4.6	3.9	6.7	6.6
Fuel, minerals and metal	27.1	-3.7	6.7	-1.6	6.5
Manufactured goods	19.0	10.1	7.9	5.2	10.3

5.03 South-South Trade in Asia: The Role of Regional Trade Agreement

1. It can be seen from 5.02 that there are different views on South-South trade among international organizations while UNCTA D has given a more positive confirmation on South-South trade. It has implemented a joint study with JETRO (Japan External Trade Organization) and completed the publication South-South Trade in Asia: The Role of Regional Trade Agreement in 2008. It is commented by Dr. Supachai ,the current Secretary General of UNCTAD that “Since early 2000, the pace and scope of globalization has been unprecedented. Integral to the expansion of global trade and investment flows has been the rise of the dynamic South-a new breed of dynamically growing developing countries taking a significant place in world trade and investment. This phenomenon has also led to a rapid expansion in trade among developing countries-South-South trade-especially in Asia”.

Therefore, there should be no conflict among these two trends, globalization and regionalism, these two trends are mutually supportive. It is also expected by Dr. Surpachai that “South-South agreements can help Doha Round deliver on its promise. It is necessary to note that S-S regional trade agreements (RTAs), including bilateral, regional and intraregional free trade agreements is a part of important instruments for trade creation, investment promotion and regional development.

2. Asia is the locomotive of S-S trade

Total exports from the South reached 4.5 trillion U.S.D., which is around 37% of world trade: South-South trade also exhibits a “hub-and-spoke” pattern in terms of geographical trade flows, while Asia is the world’s most important trade hub.

Intra-Asian trade accounted around 90% of total S-S trade and trade among East Asian and South-East Asian countries has more than half of share of S-S trade in 2006.

3. Factors influencing the expansion of S-S trade in Asia

Table 5.1 (a)(b)(c)and 5.2 have shown the facts of expansion of S-S trade in numerical data. The reason of the expansion of S-S trade in Asia is driven by the following factors.

(1) Increase in demand for natural resources from rapidly growing developing countries, for example, the high demand of import of oil, iron ore and other minerals of China.

(2) An increasing demand for new markets, particularly for exports of manufactured goods, for example, many developing countries depend highly on U.S. market for export, it runs the risk to be effected by a downturn of U.S. economy. There is need to diversify the market in export.

(3) Strategies for regional and global supply chains of transnational corporations from the North, as well as of those from the South.

(4) Growing interest across the South to integrate their economies through new bilateral, regional or interregional trade agreements, and

(5)Increased access to market information networks due to growth of the internet

4. Lessons drawn from experiences of S-S trade and RTAs in Asia and policy implications

The lessons summed up in this study may be useful for RTAs in general and trade coordination with China in special .

(1) Although RTAs can be a strong facilitator of regional trade and economic integration and entry into global and regional value chain of production and trade. It is necessary to understand that the growing interdependence of developing Asia is not solely a consequence of regional integration through RTAs, in fact, this integration is the result of intensified intra-industry linkage and cooperation.

(2) S-S RTAs can form part of a strategic scenario for enhancing intraregional cooperation and economic gains of developing countries. But the success of this strategic scenario depends largely the clear objectives and policy targets, such as regional comparative specialization and complementarity.

(3) The policymakers should have the awareness to understand the global strategies of transnational corporations of the North and South when considering entering into RTAs.

(4) Developing countries as a whole should aim at facilitating trade in the region not only through tariff reduction/elimination but also through “beyond tariff issues” (i.e. non-tariff measures, trade in services, trade facilitation and competition policy)

5.04 Some discussions of Transnational corporations

1.It has been emphasized in 4(3)of 5.03 the importance of Transnational Corporations in making RTAs, a brief discussion of TNCs especially TNCs in Asian region seems to

be feasible.

5.04 Rationality of Transforming Trade competition into Coordination with PRC

1.Chinese economy in 2007 has been briefed in part , although China is still a developing country, but its GDP and export ranked the fourth and third in the world economy currently. And China is ranked the number 1 leading producers in the developing countries of 21 categories of manufactured goods out of a total 36 categories of ISIC Rev.3 in 2006 (part of this paper). Many economies in Asia have increased their trade interaction with China. With the size of the Chinese market, the established manufacturing capabilities in many sectors and the growth potential in coming decade, transforming trade competition into coordination with PRC will provide a win-win solution both for China and its trade partner countries.

2.China is a developing country in the South, the rationality of transforming trade competition into coordination has been fully confirmed in the studies of international organizations described in 5.02 and 5.03. some further points should be emphasized.

(1)Both China and other countries in the South still rely their trade with the market of the developed countries, which can be seen from table 4.7 and 4.8 the values of higher share of those developing countries in the market of Industrial Europe and U.S.A. Some products of China and other countries in the South are in competition in those markets. This issue can be solved through appropriate coordination of industry policy: Industrial policy should be looked upon as a regional endeavour to avoid excessive competition of products in third market, and this can also involve coordination of major investment projects to avoid costly overcapacties in vey capital intensive industries.

(2).Trade cooperation with PRC will not cover the reduction of tariff and lowering technical and bureaucratic barriers, there is also need to dissemination critical information related to trade and promotion of business contacts. It can ake extend to collaborative research, training schemes and other aspects to upgrade the level of industrial production.

5.05.[36]Role of TNCs in globalization and regionalization

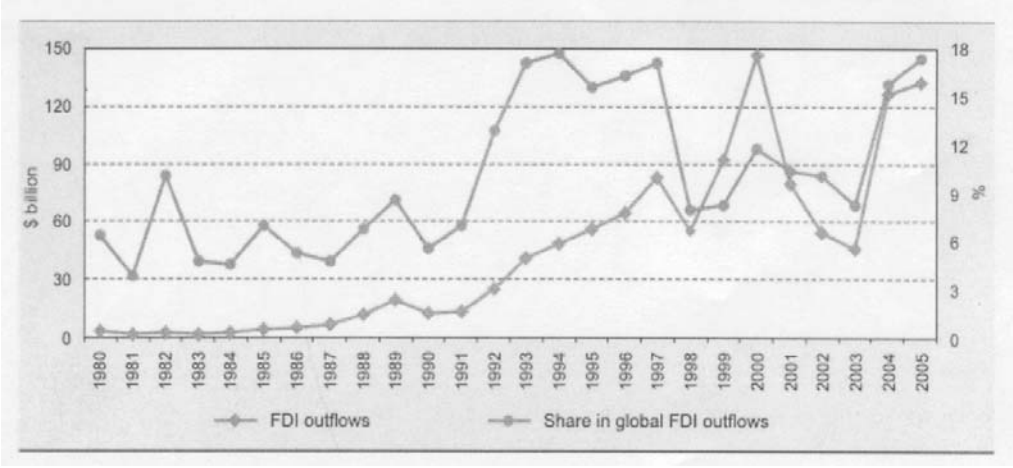
1. The facts have been accepted in general that TNCs have played a dominant role in the process of globalization and also an important factor in regionalization. The total assets and sales of foreign affiliates of TNCs reached 51.18 trillion and 25.17 trillion U.S.D. in 2006. The exports of their foreign affiliates reached 4.7 trillion U.S.D., which is around 42% of total amount of global value of export in goods. The sales of Japanese Parent TNCs of all industries reached 3099 billion U.S.D.in 2004 which is around 67% of its GDP in the same year. The sales of it 10 affiliates in East Asia in 2003 is 367 billion U.S.D., which far exceeds the value of 214.3 U.S.D. of its merchandise trade export with 10 East Asian Economies. Therefore, the impact of role of TNCs of the North should be fully taken into account in national and regional economic development and trade.

2. Growth of TNCs of the South and Developing Asia

(1)FDI has its large influence on national development and trade, China had been the

[36] Data in this paragraph is based on World Investment Report 2007 UNCTAD and Journal of East Asian Economic Perspectives Vol 18, No.1 Feb.2007 published by ICSEAD.

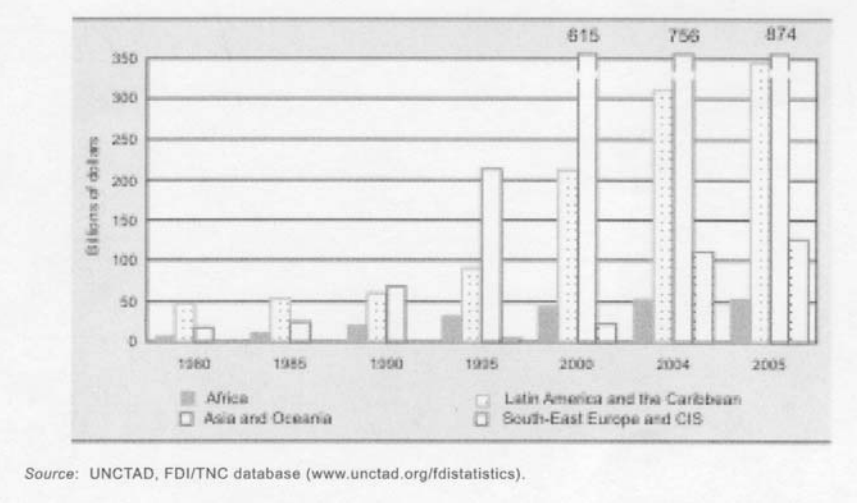
largest recipient of FDI in the Asian region, and its exports is dominated by processing goods as well as foreign invested enterprises. (See table 2.2 of part). But China has also invested abroad, this is a trend of developing countries in general. Globly, the bulk of FDI from developing countries originated from countries of Latin America in the early of 1980s in the last Century and it is now the Asian economies that dominate the outflow of FDI of the developing countrier. Fig.5.3 gives FDI outflows from developing and transitional economies from 1980-2005.



[37]Fig.5.3 FDI Outflows from developing and transitional economies 1980-2005

(2) The geographical composition of FDI from developing and transitional economies has changed over time, this reflecting the growing importance of Asia as a source region since the mid-1980s. In 2004, companies from Asian region controlled more than two thirds of the 1 trillion U.S.D. stock of FDI from developing countries. Among the top 100 TNCs from the developing world, as many as 78 were based in Asia. This change of geographical composition of FDI from the South is shown in Fig.5.4. Table 5.3 gives top 15 developing and transitional economies in terms of stocks of outward FDI in four different years. And table 5.4 gives number of parent corporations and foreign affiliates of South, East and South-East Asia, these tables will provide a general idea of development of TNCs of these regions in the South.

[37] Source: World Investment Report 2006 UNCTAD.



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).

Fig.5.4 Outward FDI Stock by source Regions 1980-2005

Table [38]5.3 Top 15 Developing and Transition Economies in Terms of Stock of Outward FDI 1980,1990,2000 and 2005

Rank	Economy	1980	Economy	1990	Economy	2000	Economy	2005
1	Brazil	38 545	Brazil	41 044	Hong Kong, China	388 380	Hong Kong, China	470 458
2	Taiwan Province of China	13 009	Taiwan Province of China	30 356	Taiwan Province of China	66 655	British Virgin Islands	123 167
3	Argentina	5 970	South Africa	15 004	British Virgin Islands	64 483	Russian Federation	120 417
4	South Africa	5 541	Hong Kong, China	11 920	Singapore	56 766	Singapore	110 932
5	Mexico	1 632	Singapore	7 808	Brazil	51 946	Taiwan Province of China	97 293
6	Kuwait	1 046	Argentina	6 057	South Africa	32 319	Brazil	71 556
7	Libyan Arab Jamahiriya	870	China	4 455	China	27 768	China	46 311
8	Panama	811	Panama	4 188	Korea, Republic of	26 833	Malaysia	44 480
9	Bermuda	727	Kuwait	3 662	Malaysia	22 874	South Africa	38 503
10	Singapore	623	Mexico	2 672	Argentina	21 141	Korea, Republic of	36 478
11	Bahrain	598	Malaysia	2 671	Cayman Islands	20 553	Cayman Islands	33 747
12	Botswana	440	Korea, Republic of	2 301	Russian Federation	20 141	Mexico	28 040
13	Bahamas	285	Saudi Arabia	1 873	Bermuda	14 942	Argentina	22 633
14	Saudi Arabia	239	Bermuda	1 550	Chile	11 154	Chile	21 286
15	Malaysia	197	Libyan Arab Jamahiriya	1 321	Mexico	8 273	Indonesia	13 735
	All developing and transition economies	72 307	All developing and transition economies	148 913	All developing and transition economies	893 102	All developing and transition economies	1 399 963

Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics).

Table 5.4[39] Number of Parent Corporations and Foreign Affiliates of South, East and South-East Asia (with latest year available)

Region/economy	Year	Parent corporations based in economy[a]	Foreign affiliates located in economy[a]	Region/economy	Year	Parent corporations based in economy[a]	Foreign affiliates located in economy[a]

[38] Source: World Investment Report 2006 UNCTAD.
[39] Source: World Investment Report 2007 UNCTAD.

South, East and South-East Asia		13681[b]	345851[b]	South Asia		655[b]	4142[b]
East Asia		12708[b]	307844[b]	Afghanistan	2006	..	5
China	2005	3429[ad]	280000[ae]	Bangladesh	2006	7	40
Hong Kong, China	2005	1167[af]	9075	Bhutan	1997	..	2
Korea, Republic of	2006	7460[ag]	13311	India	2006	587[ai]	1796
Macao, China	2004	46	1024	Maldives	2006	2	6
Mongolia	1998	…	1400	Nepal	2006	..[x]	18
Taiwan Province of China	2005	606[ah]	3034	Pakistan	2001	59[aj]	582
				Sri Lanka	2004	..	1693

3. Cooperation with PRC at the level of TNCs

Generally speaking, TNCs are the major force in driving the process of globalization. They are generally market driven. But many TNCs from the developing countries are state owned or they are at an arm length with the government. Because the large impact of TNCs on investment and trade, the role of TNCs should be fully estimated in the consideration of “Trade coordination”.

. Role of Transport on Trade

6.01 The impact of Transport cost on Trade

It has been studied by WTO and other international organizations that the transport costs are in many cases high than that provided by tariffs. A recent study of the World Bank (2001) shows that fact for 168 out of 216 US trading partners. The conclusion of that study shown that in many countries in Latin American, the Caribbean and Africa an importer pays relatively more for transport cost for tariffs.

Transport costs Vary across regions and products. Table 6.1 shows that freight cost in developing countries are on average 70% higher than in developed countries. Further more, in the share of various mode of transport in international trade, different counties differs greatly. It had been mentioned previously that the logistic cost is 8.6% of GDP of U.S.A. in 2003 while China has a logistic cost around 21.3% in the same year. With the logistic cost, U.S.A. has a share of transport cost around 5.5%, while China has a share of transport cost around 12%. The high share of transport cost may be not the sole issue for China, it may also be true for many developing countries. It is a subject reqries serious in depth study. The subject will be studied in this paper which covers only two topics related to trade cooperation with China, one is a general discussion of marine cost involved in trade, this will provide a further rationatily of coordination with China at regional level. The other is current competition and cooperation of sea ports for illustration of reationality of cooperation. Because it is difficult to have accurate data of cost of various mode of transport, table 6.2 is quoted for general reference in future study.

[40]Table 6.1 Freight cost by Region (percentage of import value)

World	6.1

[40] Source: UNCTAD, Review of Maritime Transport 2003.

Developed countries	5.1
Developing countries	8.7
Africa	12.7
Latin America	8.6
Asia	8.4
Pacific	11.7

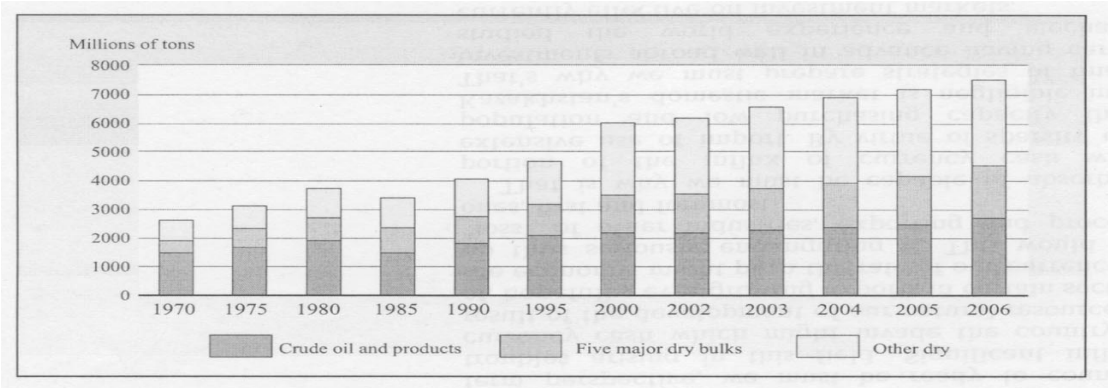
Table 6.2 Merchandise Trade by Transport Mode, U.S.A. and Japan
(percentage shares based on values and weight)

Mode	U.S.A.				Japan			
	Import		Export		Import		Export	
	Value	Weight	Value	Weight	Value	Weight	Value	Weight
Water	45.5	78.7	27.2	75.1	70.7	99.8	74.8	99.2
Air	23.4	0.3	34.4	0.6	29.3	0.2	29.3	0.8
Land	26.2	20.8	29.5	23.9	0.0	0.0	0.0	0.0
Miscellaneous	5.0	0.2	8.9	0.8	0.0	0.0	0.0	0.0

Note: Land transport includes rail, truck, and pipeline transport
Source: U.S. Department of Transportation, Bureau of Transportation Statistics, May 2002; Japan, Tariff Association, the summary report on Japan's trade, December 2002.

6.02 Rationality of Trade Coordination with PRC-Reduction of Transport cost for Sea borne Trade

1. There is rapid growth of seaborne trade. Fig.6.1 shows the growth pattern of seaborne trade from 1970 to 2006, and Fig.6.2 shows the growth of containerized trade from 1985-2006.



[41]Fig.6.1 International Seaborne Trade for selected years (Millions of tons loaded)

[41] Source: Review of Maritime Transport 2007 UNCTAD.

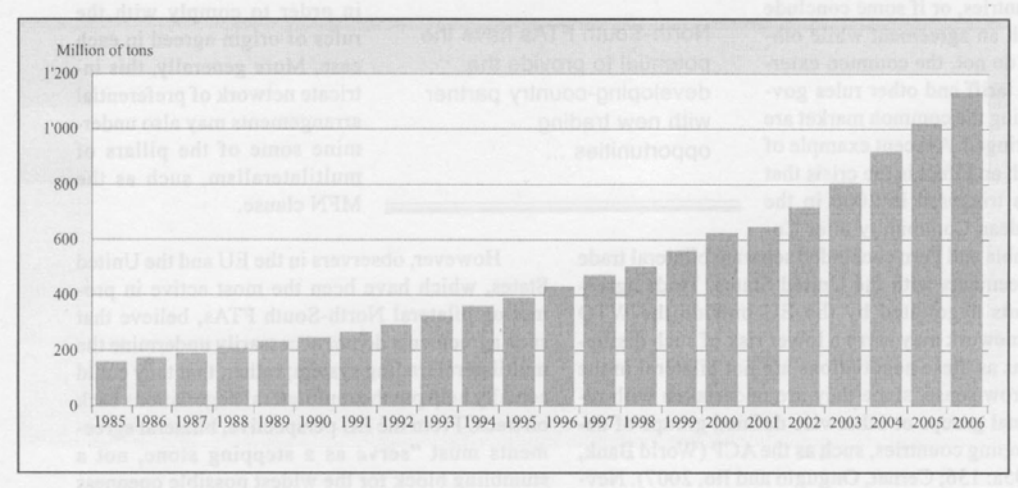


Fig.6.2 International containerized trade growth 1985-2006 (million tons)

2.The developing countries are dominated in its share of goods loaded which is shown in Fig.6.3

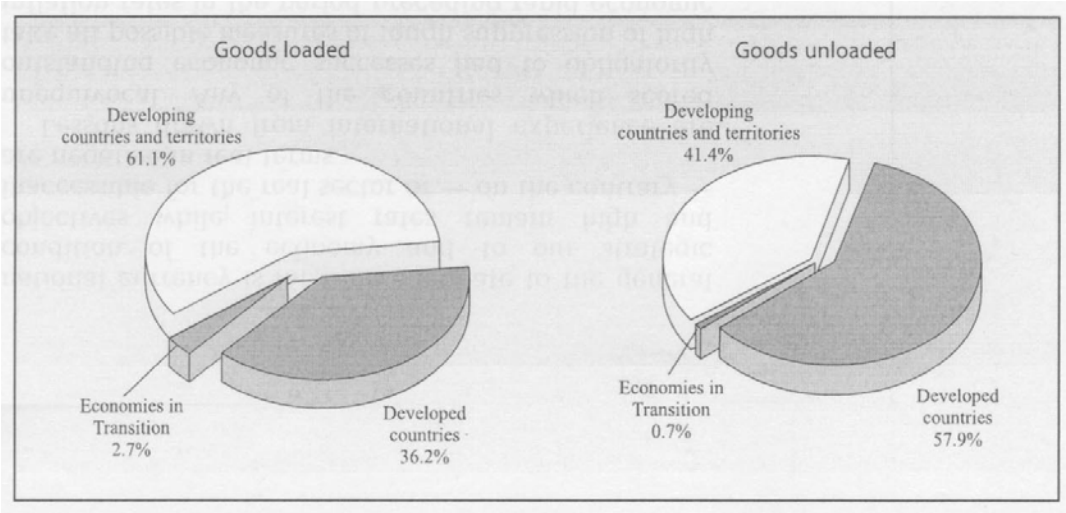


Fig.6.3 World Seaborne Trade, by country group (percentage share in tonnage)

3. The cost of marine transport is huge

The shipping cost differs greatly for different types of goods, for example, the tankers, bulks or the containers. It differs also for the size of ships, routes of transport. It also fluctuates among monthes within a year, for antainers, it also depends upon whether the container is full loaded or empty. The following figures are only for the purpose to provide a general picture.

(1) Transport cost of containers of three major routes

[42]Table 6.3 Freight Rates (Range) on the three major liner trade routes

[42] Source: Review of maritime Transport 2004-2007.

(2004-2006)(U.S.D./TEU)

Transp Pacific		Europe-Aisa		Transatlantic	
Asia-U.S.A.	U.S.A.-Aisa	Europe-Asia	Asia-Europe	U.S.A.-Europe	Europe-Aisa
1529-1923	781-838	704-825	1430-1838	778-983	1269-1762

With China for example, the total number of containers handled in 2007 is around 1.2 humdred million TEUs. Assume 75% of them is fully loaded, the shipping cost of them from China to U.S.A. will be around 13.8 million U.S.D. to 17.3 U.S.D.

(2) Transport cost of bulks

The freight rate of bulks is also varied greatly within a year. It also depends upon the route of trade and the size of ships. The round trip cost of transatlantic transport of bulks is varied from 38725 U.S.D./day to 92500 U.S.D./day in the period of 2004-2007.

(3) Transport cost of tankers

The freight rate of tankers is also varied within a year. It also depends upon the route and size of ships the freight rate of Aframax (small size tanker, 50000-99999dWt) is varied from 31000 U.S.D./day to 52000U.S.D./day.

(4) The above figure is for the purpose to give a general picture of cost of transport of different types of goods. It is estimated by UNCTAD that the marine freight cost may account 5-6% of import value for developing countries. It is estimated by a study of UNCTAD that "[43]Developing countries in Asia accounted for 67.5 percent of import value and 61.5 percent of freight payments of all developing countries as compared with 66.4% for 2003."

(5) Although it is inevitable for developing countries in Asia to have trade flow with developed countries, such as transatlantic with U.S.A. and with Europe. But if regional cooperation with PRC is further enhanced, there will be reduction of transatlantic cost to U.S.A. and to Europe: This may be one rationality to strengthen the intra-regional cooperation within Asia and China.

6.03 Rationality of Cooperation with PRC on port development –case study done by BPA (Busan Port Authority)

1. There is extraordinary growth of China's port due to growth of trade. In 2006, Shanghai reported total cargo throughput of 537 million tons, frimly establishing its, position as the world's busiert port which was hold by Singapore previously. There was only one port of China ranked among top 20 container terminals in their throughput in 1998, Shanghai was ranked No.10 while Kaohsiung and Busan were ranked to be No.3 and No.5 in that year. By the year 2006 there are 13 Chinese ports with more than 1 million TEU of container throughput, and there are six Chinese ports ranked among top 20 container terminals in throughput, with Shanghai ranked No.3 and Shenzhen ranked No.4 among the top 20 list. Busan and Kaohsiung become No.5 and No.6 respectively.

2. There is a study done by Port Authority Busan titled "New Cooperation Paradigm Among Northeast Asian Ports" which is presented in World Shipping (China) Summit

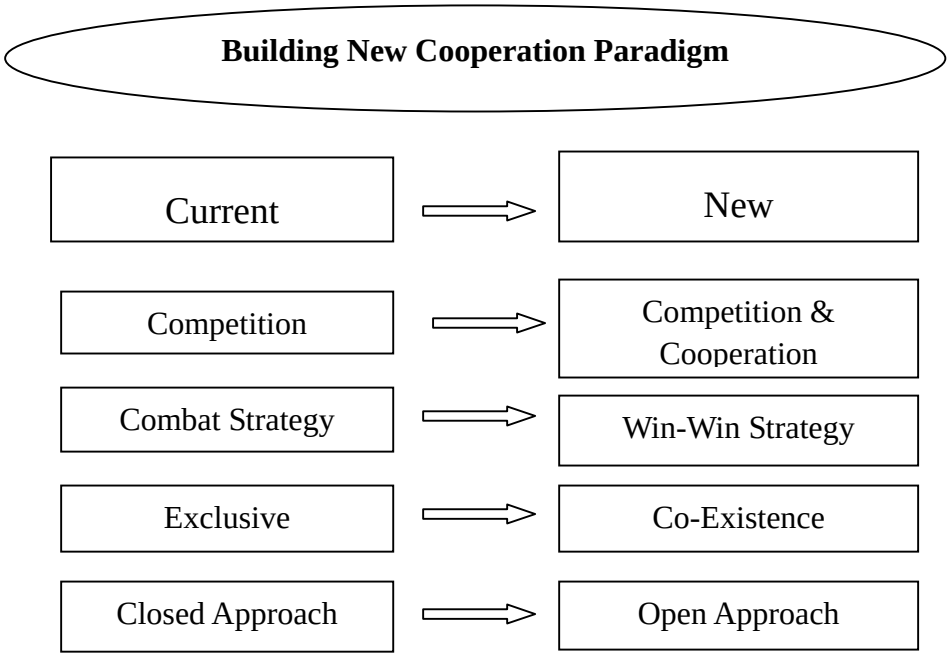
[43] Note: Review of Maritime Transport 2006.

held in Shenzhen 2006. This study is composed of four parts: current status of NE Asian Ports; competition among NE Asian Ports; Change in Maritime logistics and co-prosperity of NE Asian ports. Three parts of the last part of that paper will be abbreviated here which will not only serves to be example to reduce marine transport cost, but they may also provide useful reference for trade coordination with China.

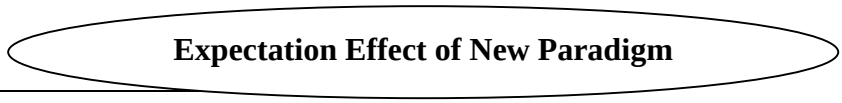
3. Briefing of "Co-prosperity of NE Asian Ports

(1) This part has summarized two cases of co-prosperity of ports. The first case of three ports of North European, Rotterdam, Hamburg and Antwerp. The second case is two ports of South-East Asia, Singapore and Tanjung Pelepas.

(2) There are three aspects of New Paradigm of Ports cooperation, which is shown in Fig.6.4, 6.5,and 6.6.



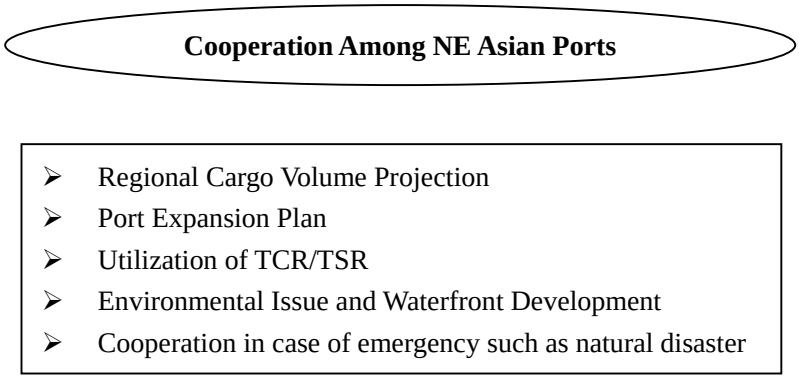
[44]Fig.6.4 New Paradigm 1 of Port cooperation



[44] Source: New Cooperation Paradigm among Northeast Asian Ports by: BPA Nov.2nd 2006.

- **Short Term**
  -Cost Reduction in Port Logistics Operation
  -Marketing Cost Reduction

[45]Fig.6.5 New Paradigm 2 of Port Cooperation



[46]Fig.6.6 New Paradigm 3 of Port Cooperation

6.04 Transport facilitation to be one essential element of regional cooperation

1. It had been described previously that intra-regional cooperation in Asia will reduce the transport cost of sea-borne trade. If it is under estimated to be 4% of the value of import (in fact it will be 5.6% for developing countries-see part),it will be around 38.4 billion U.S. dollar for China in 2007. It is a huge amount. This situation is also true for other developing countries in Asia.

2. It has been studied by UNCTAD that transport facilitation is indispensable for most countries in regional cooperation. Improving trade logistics and transport connectivity is an important element of any policy that seeks to improve trade opportunities in order to accelerate growth and structural change. It is clear that the existence of tariff barriers or quantitative constraints pose formidable obstacles to trade, but they do not render trade exchanges completely impossible as does the absence of an appropriate regional

[45] Source: Same as Fig.6.4
[46] Source: Same as Fig.6.4

infrasture.
3. The regional infrastructure covers a broad aspects rather than simple transport. It will cover telecommunication and other institutional infrastructures and others. It is impossible to describe all of them in detail.
Some sentences of a conclusion of a WTO study will be quoted to conclude this part. “Infrastructure and related services interact with trade in goods and services in a complex way. First, the cost and quality of infrastructure services are important determinants of the volume and value of international trade through the impact they have on cross-boder transactions costs. Second because sectors differ in terms of how, intensively they use infrastructure services, the quality and cost of such services also effect matters of comparative advantage.

. Conclusions

1. There are a few theories on cooperation in economic literature. Economists traditionally see trade cooperation as a means to avoid trade wars. There are some general arguments that the intentions of government to cooperate on trade policy may include strategic reasons, such as increasing market size, seeking scarce resource and insurance against unfavorable trade policy developments in partner countries. There are some international relation literatures dealing with explanations of that motivates international cooperation, and there are several strands of rationalist literature-“neoliberal institutionalism etc. It is not the purpose of study of this paper on theories. But facts and trends will be provided which are selected and analyzed from existed literatures.
2. Although trade cooperation can be studied at various level, among different parties etc. This paper focusd mainly on South-South cooperation. Because China is a developing countries among the South, the share of the population of the South is 84.7% of the world, and there is a growing share of export of goods and services of the South which is around 32.7% of the export of the world in 2006. The rationality of trade cooperation with China is analyzed from the macro-side. Many tables with very recent data are provided, it is expected that the data provided in these tables can be basis to study further the complementarity and competition by the author and other readers in coming future. In order to limit the scope of discussion, only merchandise trade is discussed.
3. Part of this paper has presented essential informations on various aspects of Chinese economy. Part has given the rapid evolution and progress of China’s industrial performance, even the study of UNIDO before 2005 cannot catch up the growth performance of China, China has become the leading producers nearly in all sectors of manufacturing activities based upon the very recent classification of ISIC Rev.3. Part shows also the increasing influence of international trade of China, it has also become the leading trading country in South-South trade. The contents of the above three parts show that with the growth potential of China, the size of its market and its full range of manufacturing capability, it can provide conplementarity in trade nearly with all countries, it is rational to cooperate with China to achieve win-win

solution.

4. Part presents the concept on globalization and regionalization, the multi-lateral trade arrangement is focusing globally while the proliferation of RTAs in recent years can promote further the multi-lateral trade arrangement. China is a developing country, China has already engaged in RTAs with several developing countries. The arrangement of FTA with Korea, Republic of and Japan is under exploration. ASEAN-China FTA has go into effect in July 2003. This is a successful example of regional cooperation. With the study in this paper, it is suggested that regional cooperation can be extended beyond tariff reduction and trade liberalization, facilitation of transport, promotion of investment flow, coordination at the policy level of industry, further liberalization of service may promote further the welfare of countries concerned. China is looking for ASEAN+3, i.e. cored with ASEAN, with the involvement of China, Japan and Korea Republic of, it may benefit the Asian Region greatly.

5. China's governmental policy on international and regional economic cooperation will be cited to conclude this report

The following section is quoted from "China's 11th –Five Year Plan" authorized by 10th China's People's Congress in March 2006 "Chapter 37 "Actively Develop International Economic Cooperation ." Section 2 "Promote International and Regional Economic Cooperation." Planning in overall and promote the facilitation of trade, investment and transport. Participate actively the international and regional cooperative institutions, enhance the dialogue and negotiation. Develop the bilateral and multi-lateral economic and trade cooperation with all countries. Participate actively the preparation of regulations related to multilateral trade and investments; promote the establishment of a new international economic order. Increase the development assistance to other developing countries, further strengthen the economic and technological cooperation with developing countries".

Reference

1. Impact analysis on Manufacturing sector of three countries from FTA of China Japan, Korea. Republic of Survey and Research Paper 3050 DRC. Nov.19.2007.
2. Industrial Development Report 2002/2003 UNIDO.
3. Industrial Development Report 2004 UNIDO.
4. Industrial Development Report 2005 UNIDO.
5. International Yearbook of Industrial Statistics 2008 UNIDO.
6. Trade and Development Report 2005 UNCTAD.
7. Trade and Development Report 2007 UNCTAD.
8. World Investment Report 2005 UNCTAD.
9. World Investment Report 2006 UNCTAD.
10. World Investment Report 2007 UNCTAD.
11. Review of Maritime Transport 2004 UNCTAD.
12. Review of Maritime Transport 2005 UNCTAD.
13. Review of Maritime Transport 2006 UNCTAD.
14. Review of Maritime Transport 2007 UNCTAD.
15. World Trade Report 2007 WTO.
16. East Asian Economic Perspectives Vol.18,No.1 Feb.2007 ICSEAD.
17. Innovative East Asia-The Future of Growth by: Shahid Yusuf 2003 The World Bank .
18. Global Economic Prospects 2005-Trade, Regionalism and Development The World Bank.
19. South-South Trade in Asia: The Role of Regional Trade Agreement Joint Study by UNCTAD and Jetro 2008 UNCTAD.
20. National Economic and Social Development Statistics 2007 Press Release by State Bureau of Statistics PRC Feb.28,2008.
21. China Statistics Yearbook 2007 China Statistics Press.